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ASIA

Agricultural Situation

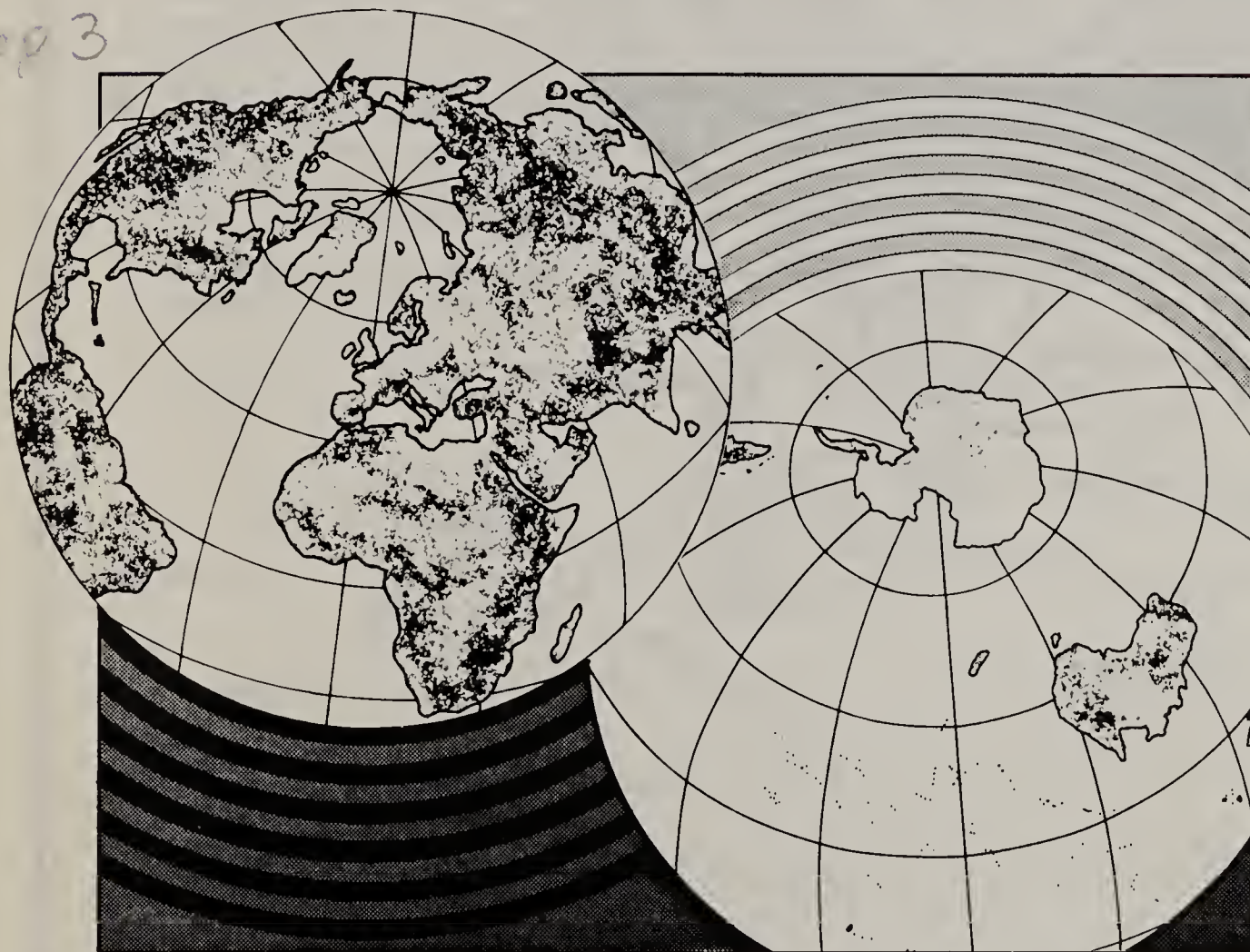
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Review of 1977 and Outlook for 1978

Cap 3



UNITED STATES DEPARTMENT OF AGRICULTURE
ECONOMICS, STATISTICS, AND COOPERATIVES SERVICE

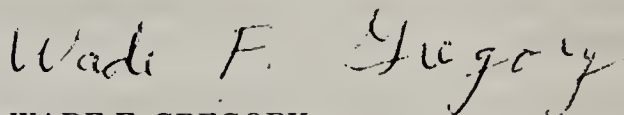
APPROVED BY THE WORLD FOOD AND AGRICULTURAL OUTLOOK AND SITUATION BOARD

FOREWORD

This annual review provides an analytical basis for shortrun policy decisions and informs the public about current agricultural developments in Asia and Oceania. It is one of seven regional supplements to the World Agricultural Situation, WAS-15, December 1977. Other regional reports are published for Africa and West Asia, Eastern Europe, the People's Republic of China, Western Europe, the Western Hemisphere, and the Soviet Union. Because of recent revisions, data in this report may sometimes differ from data in the World Agricultural Situation and occasionally from the Indices of Agricultural Production, Statistical Bulletin. This report is based on primarily information available as of March 15, 1978.

This report was directed and coordinated by the Project Leader. Those participating in the preparation included William T. Coyle, E. Wayne Denney, Julia K. Garmon, Amjad H. Gill, Miles J. Lambert, Marion R. Larson, Charles Y. Liu, John B. Parker, Dean Richards, Virginia S. Salley, Frederic M. Surls, and Carolyn L. Whitton.

Acknowledgement is extended to the Foreign Agricultural Service for assistance, especially those agricultural attaches whose reports were drawn upon extensively.



WADE F. GREGORY
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Division

CONTENTS

	<i>Page</i>
Summary	1
Afghanistan	2
Australia	3
Bangladesh	5
Burma	6
Hong Kong	8
India	10
Indonesia	15
Japan	18
Democratic Kampuchea (Cambodia)	24
North Korea	24
Republic of Korea	24
Lao People's Republic	27
Malaysia	28
Mongolian People's Republic	29
Nepal	31
New Zealand	32
Pakistan	33
Papua New Guinea	35
Philippines	36
Singapore	38
Sri Lanka	38
Taiwan	40
Thailand	42
Vietnam, Socialist Republic of	44

EXPLANATORY NOTES

Asia refers to those countries from Afghanistan eastward, with the exception of the People's Republic of China. Oceania refers only to Australia and New Zealand except some additional islands that are included for regional trade data on U.S. agricultural exports and imports.

Unless otherwise stated, split years (that is, 1976/77) mean July-June, tons are metric, and dollars are U.S. dollars. Unless specified otherwise, data on rice are for milled rice.

Calendar year production includes crops harvested during the spring, summer, and autumn of 1977 (for example) and some crops such as rice, where the bulk of the crop was harvested in 1977, but harvest continues into but harvest continues into early 1978. Unless otherwise stated, references to years are in calendar years.

GNP refers to gross national product and GDP refers to gross domestic product. HYV refers to high-yielding varieties of a crop.

Asia Agricultural Situation

Review of 1977 and Outlook for 1978

SUMMARY

Despite drought conditions throughout most of Asia, overall agricultural production increased by about 4 percent during 1977, bringing production about 2 percent above the 1954-77 trend. Most countries which recorded big gains were merely recovering from low 1976 output. One exception was Malaysia, where 1977 agricultural output was 13 percent above trend. Other countries significantly above trend were Korea (10 percent), the Philippines (7 percent), India (4 percent), and Bangladesh (3 percent). Japan, which recovered sharply from a poor 1976 harvest, was still 3 percent below the long term trend level. Burma and Thailand were also slightly below trend in 1977, as were the Oceania countries of Australia and New Zealand.

Harvests in many countries were reduced late in the year, causing agricultural output to be lower than originally expected. Severe drought cut agricultural output in Afghanistan, Australia, Indonesia, Nepal, New Zealand, and Thailand, although these declines were more than offset by substantial increases in the South Asian countries of Bangladesh, India, Pakistan, and Sri Lanka. Sharp production increases were also recorded in Japan, Malaysia, and the Philippines, where weather was generally favorable throughout the year.

With rice as the major crop in Asia, large fluctuations in this harvest were the major cause of overall agricultural production changes. Rice output in Sri Lanka was nearly 50 percent above the low 1976 crop. Harvests were up 15 percent in India and South Korea, 11 percent in Bangladesh and Japan, and 10 percent in the Philippines. Rice output was down more than 10 percent in Nepal and Thailand, with lesser declines noted for Indonesia, Malaysia, and several of the centrally planned economies.

In 1978, supplies of rice from Thailand and Burma for export delivery to Asian markets will decline sharply. Coupled with poor 1977 harvests in Southeast Asia, lower supplies are likely to cause much larger rice imports by Asian countries. The export price for Thailand's top grade white rice increased from \$290 per ton in March 1977 to

\$435 per ton on March 22, 1978—a rise of 56 percent. As Thai rice prices rise and most of the supply available for export is purchased by Indonesia, Singapore, and Hong Kong, many other importers will probably turn to the United States for rice.

Total agricultural imports by Asia and Oceania increased slightly in 1977 to about \$23 billion, with the United States providing a fourth. U.S. agricultural exports to Japan increased 8 percent to \$3.86 billion; to other East and Southeast Asia countries up 19 percent to \$2.5 billion, to Oceania up over 30 percent to \$153 million, and South Asia decreased from slightly over \$1 billion in 1976 to \$550 million in 1977. The value of U.S. farm exports to Hong Kong and Taiwan increased more than 35 percent in 1977.

The commodity mix of U.S. agricultural exports to Asia and Oceania has become more diversified, allowing the total value of farm exports to the region to rise even when prices of some major commodities are depressed or when some country stops importing a major commodity.

The value of wheat exports to Asia declined by about a third in 1977 from \$1.6 billion in 1976 to \$1.06 billion, reflecting drastic reductions in wheat sales to India and Pakistan. Exports of soybeans to the region increased 41 percent in 1977. Following soybeans, cotton and corn were the leading export commodities to Asia with values above \$1 billion. Tobacco exports to Asia and Oceania reached \$450 million—22 percent over 1976, with big increases to Japan, South Korea, Taiwan, and Thailand.

Asia produces and consumes about 90 percent of the world's rice supply. Good rice harvests in Korea and South Asia caused U.S. rice exports to Asia to fall from \$194 million in 1976 to only \$109 million in 1977. Meanwhile, Thailand increased its rice exports from 1.8 million tons in 1976 to 2.8 million in 1977, with exports to Indonesia accounting for much of the increase. U.S. sorghum exports were over \$240 million in 1977—down 8 percent from the 1976 value; Japan remained our leading export market for sorghum.

U.S. meat exports to Asia declined from \$240

million in 1976 to \$220 million in 1977, as pork exports fell from \$120 million to less than \$70 million. Larger exports of frozen poultry and beef to Japan helped to partially offset smaller imports of pork by Japan, the result of increased competition from Korea and the EC.

U.S. exports of fresh fruits increased slightly to \$180 million in 1977 with slight gains in sales of oranges to Hong Kong and grapefruit to Japan.

U.S. agricultural imports from the region increased 15 percent to \$3 billion in 1977. Higher coffee prices helped Indonesia replace the Philippines as the leading Asian source of U.S. agricultural imports. Agricultural imports from Indonesia increased 55 percent to \$630 million in 1977, whereas imports from the Philippines rose 20 percent to \$600 million.

U.S. imports of meat from Australia declined in 1977, pulling the value of U.S. agricultural imports from that country down by almost 10 percent to \$520 million. Larger purchases of dairy products resulted in a 10 percent increase in agricultural imports from New Zealand with a total value of over \$300 million in 1977.

Intra-Asian trade has increased markedly in recent years. Rapid growth in agricultural imports by Japan, Indonesia, Singapore, Hong Kong, and Taiwan has provided excellent markets for Thai and Philippine exports. Also, the Association of Southeast Asian Nations (ASEAN) has developed a significant role in bolstering trade among its five member countries—Indonesia, Malaysia, Singapore, the Philippines, and Thailand. Agricultural exports by Taiwan and South Korea to Japan, Indonesia, and Hong Kong are increasing rapidly. Taiwan became an important source of Indonesia's imports of rice

and canned foods in 1977.

India's agricultural exports to Asia are scheduled to rise markedly in 1978. India plans to send 500,000 tons of sugar to the PRC, and 300,000 tons of wheat and 70,000 tons of flour to Vietnam in 1978.

Agricultural production in the region should continue to increase in 1978, based on developments early in the year. The wheat harvest in South Asia should be up considerably. Rice harvest expectations vary considerably, but most countries are expecting output to be above the drought-affected 1977 crop. Malaysia's rice harvest will be substantially lower because of continued drought problems; Thailand's spring 1978 rice harvest is also below expectations.

U.S. agricultural exports to Asia and Oceania could reach \$8 billion in 1978—up nearly 13 percent from the 1977 level. Weaker competition from suppliers in Latin America, Australia, and Thailand in major Asian markets, and a higher value for soybeans and soybean products will account for much of the increase. The value for U.S. exports of soybeans to Asia and Oceania is likely to again exceed \$1.3 billion in 1978 because of recent price hikes related to news of the shorter than expected Brazilian crop. Higher prices for U.S. exports of tobacco, cattle hides, and rice are also likely in 1978, contributing to gains in the value of our exports to Asia and Oceania of these commodities.

U.S. wheat exports to Asia may rise above the 1977 level of 9.5 million tons and may again exceed \$1 billion as production falls off in Australia and Argentina. Less competition from Thailand should enable U.S. corn exports to Asia to surpass the 11 million tons delivered in 1977.

AFGHANISTAN

Agriculture accounts for 50 percent of the gross national product (GNP)—major agricultural products are wheat, corn, fruits and nuts, rice, cotton, karakul pelts, and wool—major agricultural exports are fruits, karakul pelts, cotton, and wool—major agricultural imports are sugar, tea, and vegetable oils.

Afghanistan's economy showed a moderate gain in 1977; real gross domestic product (GDP) moved ahead by 5.5 percent, compared with only 4 percent in 1976. Although food crop production dropped, Afghanistan's economy improved in 1977 because of higher export prices. Total export earnings showed a healthy gain to \$264 million, compared with \$242 million in 1976. Fresh fruits

and nuts, raisins, and cotton were the major commodities contributing about 67 percent of total export value. Imports in 1977 were about \$301 million, up about \$43 million from 1976.

Agricultural Production

In 1977, Afghanistan had a severe drought, which contributed to a 6-percent decline in crop production—from 6.3 million tons in 1976 to 5.9 million in 1977. Wheat, the major staple crop, accounts for 60 percent of the total cropland, with one-third planted in the drought-stricken dryland area. Total wheat production dropped from 2.9 million tons in 1976 to 2.6 million in 1977. Most of the decrease was because of production losses in the dryland area. Corn production

in 1977 fell 11 percent to 700,000 tons. Rice production increased 2 percent, whereas barley production declined 6 percent.

Although cotton covers a small area, compared with food crops, it is a very important cash crop in Afghanistan, and production has increased steadily for the last 5 years. In 1977, the Government encouraged cotton farmers to grow more cotton by distributing additional fertilizer and improved cotton seed on easy credit terms. In 1977, cotton production rose by 10,000 tons over 1976's production of 50,000 tons. Fruit, vegetable, oilseed, and sugarbeet production also increased.

Agricultural Trade

Total 1977 exports were estimated at \$264 million, up 9 percent from the 1976 level. Agricultural exports, which account for about 70 percent of the total, include fresh and dried fruits, karakul pelts, wool, and raw cotton.

In 1976, the Government emphasized quality standards and started a new raisin cleaning plant as one way to get better prices and more customers in the world market. Raisin exports jumped 14 percent to an estimated \$47 million in 1977.

Higher world prices, especially for fresh and dried fruits and cotton, enabled Afghanistan's foreign exchange earnings to rise sharply in 1977. Dried fruit export earnings rose to \$31 million, an increase of \$4 million over 1976. Fresh fruit exports increased slightly to \$26 million in 1977. Karakul pelt earnings, which had been slipping for the last 3 years, showed a gain of \$2 million in 1977 over 1976 earnings of \$20 million. Cotton was Afghanistan's best cash crop with steadily increasing earnings during the last 5 years. In 1977, Afghanistan cotton exports were worth \$65 million, a 10 percent increase over

1976, with most going to the USSR.

Afghanistan's total imports increased from \$258 million in 1976 to an estimated \$301 million in 1977. Wheat, sugar, tea, and vegetable oil were the major food commodities imported with the USSR, India, Japan, and the United States as the major suppliers.

Afghanistan maintains bilateral trade agreements with the USSR and India. The USSR takes Afghanistan's natural gas exports and a substantial part of their cotton, wool, and fruits and nuts. Major imports from the USSR are petroleum and petroleum products, sugar, and numerous capital goods. Afghanistan's major export commodities to India are cotton, fresh and dried fruits and nuts, wool, and lambskins. Imports from India are many kinds of consumer goods, textiles, fertilizers, and machinery.

The U.S. share of Afghanistan's agricultural imports decreased from \$1.6 million in 1976 to \$819,000 in 1977. Wheat, nonfat dry milk, tallow, and soybean oil were the major commodities exported to Afghanistan. U.S. agricultural imports from Afghanistan rose in value from \$9 million in 1976 to \$11.5 million in 1977. Major items were sheep, goat, and karakul skins, licorice root, and goat hair.

Outlook

Outlook for 1978 agricultural production appears to be on trend. Rainfall has been adequate for the 1978 wheat crop, and an output of around 1.8 to 3 million tons is expected. Afghanistan will receive 50,000 tons of wheat from the United States and another 50,000 tons from India in 1978. If drought recurs in 1978, reducing the wheat harvest, imports between 200,000 to 250,000 tons of wheat may be necessary. (*Amjad H. Gill*)

AUSTRALIA

Agriculture accounts for 5 percent of GDP—major agricultural products are wool, wheat, milk, and beef—major agricultural exports are wool, wheat, beef, and sugar—major agricultural imports are tobacco, fruits, vegetables, rubber, coffee, tea, and vegetable oils.

Government policies continue to emphasize lower inflation. During 1977, inflation slowed to 9 to 10 percent, compared with 13 percent in 1976 and 15 percent in 1975. Together with Government borrowings overseas, recent pressures for devaluation have eased (the last official devaluation was in November 1976). Lower inflation

was largely attributable to a decline in manufacturing and curbs on Government spending. The high unemployment rate—near 6.5 percent in December 1977—occurred as a side effect.

Current forecasts indicate that the value of farm production in 1977/78 (July-June), will be about 3 percent less than in 1976/77, or about \$7.4 billion. This is about \$1 billion less than expected at the outset of the year. Value of crop output is expected to decline by about 9 percent from 1976/77, largely because of a decrease in grain production. The value of livestock production, is forecast to rise 2 percent mostly because of increased beef output associated with liquidation of the breeding herd.

Agricultural Production

Prolonged drought in vast areas of the country, beginning in late 1977, cut the wheat crop about 21 percent from 1976/77 to an estimated 9.3 million tons, despite the 14 percent larger acreage. Production of Australia's major feed grain, barley, was down sharply and the outlook for all coarse grains is for about 4.4 million tons, down from 5 million tons in 1976/77.

For 1977/78, oilseed acreage may rise 10 to 15 percent over the 1976/77 level, and production may be up by 40 to 60 percent; with most of the increase in soybean production, which could reach 90,000 tons. Sugar production in 1977/78, at 3.4 million tons, was slightly above last year's 3.3 million tons.

Red meat production in 1977/78 will rise above previous estimates and surpass the 1976/77 record of 2.7 million tons. Due to drought-induced slaughtering, beef and veal production may total more than 2 million tons, perhaps by as much as 10 percent above 1976/77. Following 2 years of falling cow numbers and 2 years of drought in some key areas, milk production was down about 9 percent in the first four months of 1977/78, compared with the same period in 1976/77.

Wool production for 1977/78 is currently estimated at 668,000 tons, or about 5 percent below 1976/77, the lowest level in 20 years. The drought brought a decrease in average fleece weight, but lower production was inevitable with declining flock numbers.

Agricultural Trade

Australia's trade surplus during 1977/78 will be narrowed as a result of drought. Adding to the impact of weather is the failure of export unit prices to rise to the high levels of recent years. During the first third of the year, the export value of farm goods was down 18 percent, while import value was up by 47 percent from the same period in 1976/77. Major causes for larger import values were higher prices for coffee, tea, tobacco, and vegetable oil.

Despite the severe drought continued strong exports of wheat, including flour, will bring 1977/78 exports of wheat to about 9 million tons, the highest level since 1970/71. Total earnings may fall, however, as unit values have been down. Export tonnage of feed grains are below those of 1976/77, as are unit values. Unit prices are

depressed for sugar, but export volume will probably match the 1976/77 record of 2.6 million tons.

During the first third of 1977/78, Australia exported 260,000 tons of boneless beef, up 27 percent from a year ago. Most of the increase went to the United States. Although the Soviet Union and Eastern Europe took about 20 percent of all beef and veal exports in 1976/77, it is unlikely that they will be able to repeat this level in 1977/78.

Live sheep sales to the Middle East have become important but they are threatened by restraining actions being encouraged by Australian slaughterhouse workers. At the urging of the meatcutters' union, exports from three states have already been banned.

Outlook

Economic conditions in Australia indicate a gradual recovery of business confidence as inflation rates decline and the Australian dollar firms. The rise in the Consumer Price Index (CPI), the major measure of inflation, is expected to be about 8 to 9 percent. The usual rate of growth in the economy has not reappeared, but some sources predict a real GDP growth rate as high as 4.5 to 5 percent, compared with 2.1 percent in 1977. Government expenditures are being overtaken by consumer outlays as the main force in this growth. Consumer expenditures seem to be increasing as prices attain greater stability and appear to be one of the few bases for presupposing genuine health in the economy.

Farm production in 1978/79 could be down again if rains do not significantly improve the drought damaged areas before wheat and barley sowings commence in April-May. Herd and flock liquidation should begin to ease in late 1978, stabilizing numbers and bringing meat production down to a level compatible with marketing prospects and prices that are more favorable to producers. However, the current drought has already cast a shadow over prospects for the agricultural trade surplus in 1978/79, largely because of the reduction in grain output. Australia has little wheat for export that has not already been committed to Egypt, the People's Republic of China, and Indonesia, or to regular customers, including Japan and countries in Southeast Asia and Oceania. Wheat exports in 1978/79 may drop to 8.5 to 9 million tons. (*Miles J. Lambert*)

BANGLADESH

Agriculture accounts for 60 percent of GDP—major agricultural products are rice, jute and sugarcane—major agricultural exports are jute and tea—major agricultural imports are wheat, rice, vegetable oils and cotton.

With the exception of two mutinies by disaffected troops in September and October, 1977 was a year of quiet political and economic progress. Local and municipal elections were successfully held, while district and national elections were planned for 1978. Near-record food grain production—up 9 percent over the previous year—will boost 1977/78 GDP growth to 7 percent; this compares with GDP growth of 3 percent in 1976/77, when both prices and agricultural output were down.

Other indicators also suggest an improved economic situation in 1977/78. Increased imports are expected to ease supply bottlenecks. This, in addition to greater food grain output, is expected to relieve inflationary pressures bringing the 1977/78 inflation rate below 10 percent from 13 percent in 1976/77. Foreign aid disbursement is expected to rise from \$505 million in 1976/77 to \$700 million in 1977/78. In 1977/78, Bangladesh expects wage earner receipts of \$80 million from that part of the population working in the Middle East and United Kingdom. At the end of September 1977, foreign exchange reserves were \$270 million, compared with \$254 million a year earlier.

Most encouraging of all, the Bangladesh Government has been quite successful in its inaugural drive to buy significant quantities of domestically produced food grain for its rationing system, and to stabilize domestic rice prices in 1977/78. Traditionally, the Government has procured only small quantities of grain from local farmers, relying principally on imported grains for its rationing program.

Prices have typically swung from low levels at harvest time (December through March) to high levels during the lean season (July through November). Reducing this price swing—which kills incentive for farmers who must sell immediately after harvest and which hurts rural consumers, who do not participate in the rationing system—is a long-standing goal of the government.

Since July 1977, however, open market prices have remained stable at the relatively high Taka 130 per maund (22 cents per kilogram). Increased Government procurement during the aman (main) harvest resulted in ample stocks for July through September and also kept prices high. By mid-

February the Government had already reached its 1977/78 target of 400,000 tons of aman rice. Procurement targets of 15,000 tons of boro rice and 10,000 tons of wheat had yet to be achieved. The Government has said it will continue to buy, even beyond its combined 500,000-ton target, so long as rice is available at the current procurement price. In 1976/77, about 300,000 tons of rice were procured.

At the beginning of July 1977, food grain stocks were approximately 380,000 tons. With 1977/78 food grain imports at nearly 2 million tons, procurement of 500,000 tons and offtake of 1.8 million tons, ending stocks in June 1978 should meet the Government's target of 1 million tons.

Agricultural Production

Rice production in 1977/78 is estimated at a record 13 million tons, up 11 percent from last year's level, but about 3 percent below trend. The aman crop set the pace with a bumper harvest of 7.5 million tons. Favorable rice prices led to fertilizer use of 20 to 50 percent above target levels.

Although it is still a minor crop in Bangladesh, wheat is also expected to hit a new high in 1977/78, climbing 63 percent to about 425,000 tons, or 85 percent above trend. This expansion is attributed to increases in hectareage and HYV use. In 1977/78, 4,300 tons of HYV seeds were procured domestically, and the Government plans to increase HYV seed distribution 40 percent to 6,000 tons.

The rice/jute price ratio (TK 50-60 per maund-/TK 90 per maund) at the start of the planting season in January-February 1977 was favorable to jute, resulting in 1977/78 production estimated at 990,000 tons, up 13 percent above the previous year's crop but 9 percent below trend. The area sown to jute in 1977/78 rose 12 percent to 728,000 hectares. Although the total volume of the 1977/78 crop was up, neither volume nor quality improved as anticipated, due to early rainfall that induced premature flowering. In areas where plants bloomed prematurely, farmers cut the jute and replanted their fields with rice.

Oilseed area and production have stagnated in recent years because of relatively favorable returns and strong competition with food grains for available cropland. Oilseed production totaled 235,000 tons in 1977, about the same as the 1976 level.

For the first time, sugarcane production in 1977/78 is likely to meet the pre-independence level of 7 million tons. Including gur (jaggery), 1976/77 sugar production is expected to exceed

domestic demand, leaving up to 30,000 tons for export. These sugar exports, are considered a one-time phenomenon.

Tobacco production and area are likely to be down in 1977/78 to approximately 51,000 tons and 60,000 hectares. This level is nevertheless 30 percent above trend. Recent high production caused marketing problems for farmers not registered with the Bangladesh Tobacco Company.

Agricultural Trade

Bangladesh continues to be heavily dependent on exports of raw jute and jute products for foreign exchange earnings. As a percentage of total export value, however, jute exports have been declining: From 90 percent in 1972/73 to under 80 percent in 1977/78. Exports of tea, fish, shrimp, and leather, among others, have been increasing.

In 1977/78, exports of *raw* jute—estimated at 378,000 tons, down 8 percent from 1976/77. Exports went primarily to Western Europe, the USSR, Egypt, and the PRC. Exports of jute *products*, on the other hand, may reach a record 500,000 tons in 1977/78. Exports go primarily to the United States and Australia. Tea exports are expected to decline in 1977 from the bumper 23,000 tons exported in 1976.

In 1977/78, total imports are expected to rise to \$1.25 million, up 45 percent from 1976/77. Chief among these are concessionary food grains totaling 1.9 million tons, which compare with average annual food grain imports of 1.8 million tons since independence. The United States has agreed to send 664,000 tons of food grain to Bangladesh in 1977/78, including 200,000 tons of wheat under P.L.-480, Title I. An additional 200,000 tons is slated for the "Food for Work" program under P.L.-480, Title II. Bangladesh is dependent on imports for more than 50 percent of its annual edible oil needs of 160,000 tons; in 1977 the United States provided about 13 percent, down from 32 percent in

1976. Cotton imports in 1977 were 43,500 tons, up 16 percent from 1976. The U.S. share was about 52 percent in 1977, down from 74 percent in 1976.

U.S. agricultural exports to Bangladesh totaled \$129.4 million in 1977, up 40 percent from 1976. In 1977, U.S. wheat exports to Bangladesh were worth \$51.3 million, while cotton exports were worth \$38.9 million. The United States is the largest market for Bangladesh's exports; U.S. imports of Bangladesh agricultural products, primarily raw jute fiber and tea, totaled \$3.5 million in 1977, down 17 percent from 1976.

Outlook

The outlook for Bangladesh is mixed: Deep-seated social and economic traditions, combined with a sharply limited resource base, make social and economic progress extremely difficult. Low productivity remains the country's largest problem. Rice yields are barely half those of neighboring Malaysia. Tenants, who together with the landless make up the majority of rural households, have difficulty in obtaining access to government-subsidized inputs and government credit.

On the brighter side, food grain production is expected to increase 3.5 percent annually during the next 5 years, resulting in an additional 500,000 tons of food grain each year. Wheat production, which has expanded at an average annual rate of 20 percent for the last decade, is expected to maintain an impressive growth rate.

Nevertheless, these increases in food grain production will barely maintain per capita consumption for a population growing at 2.8 percent annually. Combined with the volatile nature of domestic food production (the area is prone to cyclones, floods, and droughts), this population growth will ensure continued need for significant external assistance in the foreseeable future. (Dean Richards)

BURMA

Agriculture accounts for 36 percent of GNP—major agricultural products are rice, pulses, and sugarcane—major agricultural exports are rice and pulses—major agricultural imports are cotton and vegetable oils.

Emerging from a protracted period of economic stagnation, Burma remains beset with excessive economic ailments: Slow growth, underinvestment, a negative balance of payments, deterioration of public finances, rising unemployment, and inadequate producer prices. Imports of raw

materials, capital equipment, and spare parts—all essential for development—have been hindered by elaborate import procedures, high foreign exchange reserve targets, and diminished exports.

In 1976/77 (April 1976-March 1977) GDP rose by 6 percent in real terms, compared with 4.8 percent in 1975/76 and 2.6 percent in 1974/75. GDP growth in 1977/78 is estimated at 6.3 percent. The Rangoon consumer price index, based on official and free market prices, was 6 percent lower in August 1977 than in December 1976. A 21 percent increase in on-shore crude oil production in 1975/76 left Burma self-sufficient in oil; in

1976/77, Burma exported both oil and oil products.

Agricultural Production

Although accounting for only 36 percent of GNP, agriculture is a major source of raw materials for industry and provides the basis for domestic and external trade. Following a decade of relative stagnation, the agricultural sector responded slightly to good weather and higher procurement prices in 1976/77. Total agricultural output increased by about 1 percent. Fertilizer use rose to about 170,000 tons in 1977/78, up more than 40 percent from 1975/76.

Of the approximately 9.3 million hectares cultivated in Burma, about 55 percent are sown to rice. A light monsoon during the summer of 1977, combined with unseasonal rains during the December harvest, reduced the 1977/78 rice crop to about 5.9 million tons, or 5 percent below the 1976/77 bumper crop. An increase in the procurement price, announced after sowing, will probably have little effect on Government procurement since black market paddy prices remain as much as three times the procurement price. Transportation constraints will also hinder procurement increases. Seed shortages and farmers' unwillingness to plant because inadequate water controls have restricted HYV use to about 410,000 hectares, or 8 percent of the rice area.

With almost 20 percent of the total pulse output exported, pulses are an important source of foreign exchange. The 1977/78 pulse crop is expected to remain at the 1976/77 level of 220,000 tons. This represents a 30-percent increase over the 1975/76 crop.

Sugarcane production in 1976/77 dropped about 1 percent below 1975/76 production, to 1.6 million tons. High production costs and unfavorable prices discouraged expansion of land under sugarcane in 1976/77. Stem rot, insect and rodent damage, and insufficient fertilizer use have kept yields down.

Virginia and native tobacco output increased in 1976/77, resulting from favorable weather and expanded hectareage. Combined output was 56,000 tons, up slightly from the 54,000-ton 1975/76 crop. Production in 1977/78 is likely to remain around 56,000 tons.

Agricultural Trade

Current economic policies give priority to development of primary export sectors: agriculture, forestry, fishery, and mining. Agricultural commodities now comprise about 70 percent of

total exports. Devaluation of the kyat—by 23 percent in December 1974 and 9 percent in May 1977—made exports more competitive and helped compensate for continued overvaluation caused by the economy's reduced export capacity and a 156 percent increase in the domestic price level since 1972. Transportation bottlenecks continue to pose serious constraints on export expansion. Teak and other hardwood exports have been most affected by inadequate transport infrastructure, although rice and pulse exports have also been checked.

Official estimates for 1977/78 show total exports of \$20.1 million, up nearly 40 percent from 1976/77. In 1977/78, imports rose 77 percent from 1976/77, to \$33.4 million. Capital goods accounted for more than half the total imports in 1977/78. A balance of payments deficit of \$3.2 million is anticipated for 1977/78, nearly triple the 1976/77 deficit of \$1.1 million.

In 1976/77, rice and teak exports earned nearly 80 percent of Burma's total export receipts of \$192.8 million. Rice reports, at 630,000 tons, were valued at \$80 million. Indonesia remained Burma's principal customer, buying 200,000 tons in 1977. Sri Lanka and Bangladesh were also major importers of Burmese rice. Rice exports for 1977/78 are not likely to reach the Government target of 800,000 tons, due to that year's diminished crop.

Teak exports reached a record \$57 million in 1976/77, although volume was down. Although total output of pulses increased in 1977, officially reported exports declined to 36,000 tons, valued at \$10 million.

Agricultural trade between Burma and the United States is minimal. The value of Burmese imports of U.S. agricultural commodities dropped from \$115,000 in 1975 to \$40,000 in 1976 to only \$2,000 in 1977. U.S. imports of Burmese agricultural commodities slid 84 percent, from \$32,000 in 1976 to \$5,000 in 1977. Most of this was for tobacco.

Outlook

The outlook for economic development in Burma appears brighter than it has recently. Increased external assistance, combined with higher imports, is likely to result in significantly greater use of existing resources. Agricultural production will benefit from adoption of modern cultivation know-how, reclamation of abandoned land, stronger procurement prices, and export-oriented growth. Total rice production is projected to increase 20 percent in the next 4 years (i.e., by the end of the Third Four-Year Plan), to 7 million tons. (*Dean Richards*)

HONG KONG

Agriculture accounts for 1 percent of GDP—major agricultural exports are vegetable preparations and bakery products—major agricultural imports are cotton, livestock, rice, and fruits and vegetables.

Economic growth in Hong Kong averaged 7 percent in 1977—pushing GDP to a record \$10.3 billion. With more than 90 percent of the industrial production exported, rising exports have created additional employment.

Total exports increased about 4.6 percent in 1977 to \$7 billion, although exports to the United States were up by more than 21 percent to \$2.8 billion. Larger exports of textiles, electronics, watches, and toys to the United States and the Mideast helped offset smaller exports to Europe, Japan, and Australia.

Total exports of textile yarns, fabrics, and clothing in 1977 were about a sixth below the 1976 value of \$3 billion, causing demand for imported raw cotton to decline slightly. Exports of some other items increased markedly. Exports of watches, particularly digital styles, increased more than 60 percent to almost \$400 million. Exports of transistor radios soared more than 50 percent to over \$400 million.

Total imports increased about 20 percent in 1977 to \$10.6 billion, with those from the United States reaching \$1.5 billion—about two-fifths above the 1976 level.

Agricultural Production

Hong Kong's pork and poultry output continued to expand. Rising prices for meat and relatively low prices for imported feed contributed to the expansion. Local farmers provide over half of the poultry meat and about a seventh of the pork consumed on the Island.

Vegetable production continued to rise as greater use of multiple cropping and improved varieties contributed to higher yields from the 5,000 hectares planted to these crops. The area planted to rice declined as the shift to vegetables continued in farmland areas of the New Territories.

Agricultural Trade

Agricultural imports by Hong Kong increased from \$1.8 billion in 1976 to about \$2.0 billion in 1977. Higher prices for rice and larger imports of livestock, meat, fruits, and vegetables contributed

to the increase. The PRC continued to supply over half of Hong Kong's food imports. Dwindling deliveries of pulses, oilseeds, and corn from PRC in 1977 caused Hong Kong to seek other suppliers. Thailand was a major source for Hong Kong imports of corn, pulses, and peanuts.

Rice imports increased from 336,090 tons in 1976 to about 345,000 tons in 1977. Thailand and the PRC remained the leading suppliers with Australia becoming a more important source of rice in 1977 as purchases from Thailand became more difficult.

Wheat imports rose from 132,000 tons in 1976 to 150,000 tons in 1977. Imports from Australia increased, while arrivals from the United States remained near the 104,000 tons received in 1976.

U.S. agricultural exports to Hong Kong increased 48 percent in 1977, from \$206 million in 1976. Cotton accounted for most of the increase, rising from \$52 million in 1976 to \$123 million in 1977. Dramatic growth in U.S. exports of eggs also occurred. U.S. exports of melons, fruit juices, soybean oil, and peanuts to Hong Kong soared in 1977. Hong Kong remained a major market for U.S. exports of frozen poultry in 1977, although the value dipped 1.4 percent to \$16.7 million.

Hong Kong has a considerable export trade in processed foods, particularly to Southeast Asia, the Mideast, and the South Pacific. Agricultural exports increased from \$242 million in 1975 to \$335 million in 1976 and neared \$400 million in 1977. The country is a major source of specialty foods for Chinese restaurants in the United States. U.S. agricultural imports from Hong Kong increased about 50 percent in 1977 to \$18 million.

Outlook

Exports of U.S. cotton to Hong Kong are expected to decline moderately in 1978. Gains in U.S. exports of cereals, eggs, fruits, and vegetables should offset the decline in cotton and possibly boost U.S. agricultural exports to Hong Kong to \$315 million in 1978. Thailand's difficulty in making rice deliveries in 1977/78 could create a temporary opportunity for U.S. sales of 50,000 to 100,000 tons of rice to Hong Kong in 1978. New sales of soybeans, pulses, and certain processed foods are also likely.

Hong Kong's agricultural imports are likely to reach \$2.2 billion in 1978. Larger imports from Brazil, Pakistan, and Australia are probable, but imports from PRC might show a slight decline. (John B. Parker)

INDIA

Agriculture accounts for 45 percent of the GDP—major agricultural products are rice, wheat, sugar, and oilseeds—major agricultural exports are sugar, tea, peanut meal, tobacco, cashew kernels, and coffee—major agricultural imports are vegetable oils, cotton, wheat, and rice.

India's foreign exchange balance and export performance have reached new peaks, although purchasing power for the poorer half of the population has shown little improvement. Food prices increased 12.5 percent in 1977, partly because of a 60-percent price rise for pulses.

Total GNP increased about 4.5 percent to \$96 billion in 1977, leaving a per capita GNP of \$150, an increase of about 2.5 percent above 1976. About 1 percent of the work force is now employed outside the country and the average per capita income for this group exceeds \$7,000. Remittances to India from these workers might approach \$2 billion in 1978.

Total imports increased from \$5.1 billion in 1976 to \$6.2 billion in 1977. Petroleum imports rose to \$1.7 billion in 1977 and would have been higher without the 20 percent rise in domestic output. Smaller imports of grain also kept the value of imports down.

Total exports increased from \$5 billion in 1976 to more than \$6.5 billion in 1977, because of gains in the value for shipments of engineering goods, cotton textiles, tea, and diamonds. The Mideast construction boom has bolstered India's exports of steel, tiles, and plumbing fixtures.

Industrial output increased 19 percent in 1977 because of strong export demand and considerable gains in demand for farm inputs. About 31,000 tractors were assembled in India during 1977. Output of fertilizer increased to about 2.6 million nutrient tons in 1977—a gain of 30 percent over the previous year.

Agricultural Production

Overall, agricultural output increased about 4 percent in 1977. Monsoon rainfall was favorable in the summer of 1977, although the lack of it in late September prevented growing conditions from reaching the optimum levels of 1975. Severe storms in November 1977 destroyed about 1 million tons of rice in Andhra Pradesh and Tamil Nadu. Even so, current estimates indicate that India's 1977/78 (July-June) rice output will be about 15 percent above the 1976/77 level of 42.8 million tons. Higher yields in the Gangetic Plain contributed to most of this increase. About one-fourth of the 4 million nutrient tons of fertilizer

distributed in 1977 was used for rice. About 13 million hectares were planted in high-yielding rice varieties and average yield was twice that for 26 million hectares of traditional varieties. Production of wheat and peanuts increased slightly in 1977. Output of coarse grains and pulses declined but cotton increased about 10 percent.

Following a 12-percent rise in 1976, vegetable production increased slightly in 1977 to about 35 million tons. Potato output remained stable at 7.3 million tons in 1977.

New orchards brought mango production up about 6 percent to 9 million tons. Output of oranges and guava were each about 1 million tons. Grape production increased markedly to 260,000 tons. Apple production recovered from the poor 1976 harvest and reached 300,000 tons in 1977. Jute production declined 3 percent to 936,000 tons in 1977. Tea production increased 8.3 percent to 555,000 tons in 1977 and coffee output increased 20 percent to 107,000 tons.

Agricultural Trade

India's agricultural trade has changed dramatically since 1972, the year before the big increase in oil prices. Agricultural imports climbed from \$431 million in 1972 to a peak of \$1.75 billion in 1975 and then declined to about \$1.2 billion in 1977 (see table). Total agricultural exports increased from \$780 million in 1972 to \$1.58 billion in 1975 and exceeded \$1.64 billion in 1976 and 1977. In 1976 and 1977 India was a net exporter of agricultural commodities. Despite recent policy changes, including steps to curtail exports of many farm products, India is likely to remain a net exporter of farm products in 1978.

Sugar exports reached a peak of \$563 million in 1975, then declined to \$270 million in 1976 and to only \$30 million in 1977. Tea exports soared from \$313 million in 1976 to \$520 million in 1977. Exports of coffee, tobacco, and spices also increased in 1977.

There are several reasons for the change in India's agricultural trade policy. Foreign exchange reserves now exceed \$5.4 billion and further gains are likely during 1978, as remittances from the 1 million Indians working in the Mideast rise sharply. This new wealth has created a different attitude towards agricultural exports.

When India had only \$1 billion in foreign exchange in 1974, agricultural exports were promoted vigorously, often causing higher prices for Indian consumers. The new emerging policy thrust is to favor low food and clothing prices. To achieve this goal, exports of many farm prod-

Table 2 --India: Area and production of cereals high yielding and traditional varieties, 1966/67-1977/78 (July-June)

Crop	Area				Production				Average Yield			
	-- 1,000 Hectares --				-- Metric tons --				-- Kilograms per hectare --			
	HYV	TV	Total	Share HYV	HYV	TV	Total	Share HYV	HYV	TV	Total	
Rice:												
1966/67	888	34,363	35,251	2.5	1,900	28,538	30,438	6.2	2,140	830	863	
1967/68	1,785	34,652	36,437	4.9	3,800	33,812	37,612	10.1	2,149	976	1,032	
1968/69	2,681	34,286	36,967	7.3	5,500	34,261	39,761	13.8	2,051	999	1,076	
1969/70	4,344	33,336	37,680	11.5	9,200	31,230	40,430	22.8	2,118	937	1,073	
1970/71	5,589	32,003	37,593	14.9	12,000	30,225	42,225	28.4	2,147	944	1,123	
1971/72	7,411	30,347	37,758	19.6	13,300	29,761	43,061	30.9	1,995	981	1,141	
1972/73	8,167	28,521	36,688	22.3	14,412	24,833	39,245	36.7	1,765	871	1,070	
1973/74	9,718	28,567	38,285	25.4	16,700	27,351	44,051	37.9	1,718	957	1,151	
1974/75	10,780	27,107	37,887	28.5	17,500	27,078	39,578	44.2	1,623	815	1,045	
1975/76	12,745	26,680	39,425	32.4	21,040	27,700	48,740	43.2	1,644	920	1,235	
1976/77	13,500	25,106	38,606	35.0	19,700	23,088	42,788	46.0	1,459	920	1,108	
1977/78	14,400	25,400	39,800	36.2	23,500	26,000	49,500	47.5	1,632	1,024	1,244	
Wheat:												
1966/67	541	12,237	12,838	4.2	1,278	10,115	11,393	11.2	2,362	823	887	
1967/68	2,942	12,056	14,998	19.6	7,843	8,697	16,540	47.4	2,666	721	1,103	
1968/69	4,793	11,165	15,958	30.0	11,180	7,472	18,652	59.9	2,333	669	1,169	
1969/70	4,918	11,708	16,626	29.6	12,200	7,893	20,093	60.7	2,481	674	1,209	
1970/71	6,480	11,761	18,241	35.5	15,600	8,232	23,832	65.5	2,407	700	1,307	
1971/72	7,861	11,278	19,139	41.1	16,780	9,630	26,410	63.5	2,135	854	1,380	
1972/73	10,177	9,287	19,464	52.3	17,600	7,135	24,735	71.2	1,729	768	1,127	
1973/74	10,912	7,676	18,583	58.7	15,800	5,978	21,778	72.6	1,448	779	1,172	
1974/75	11,216	6,794	18,010	62.3	17,100	7,084	24,184	70.9	1,525	1,043	1,338	
1975/76	13,665	6,789	20,454	66.8	21,800	7,040	28,846	75.6	1,595	1,038	1,410	
1976/77	14,400	6,463	20,863	69.0	22,500	6,582	29,082	77.4	1,562	1,018	1,394	
1977/78	14,600	6,400	21,000	69.5	23,500	6,500	30,000	78.3	1,610	1,016	1,429	
Coarse grains:												
1966/67	457	44,640	45,097	1.0	610	23,443	24,053	2.5	1,335	525	533	
1967/68	1,309	46,028	47,337	2.8	1,550	27,248	28,798	5.4	1,184	592	608	
1968/69	1,823	44,418	46,241	3.9	2,150	23,037	25,187	8.5	1,179	520	545	
1969/70	2,132	45,109	47,241	4.5	3,500	23,787	27,287	12.8	1,641	527	578	
1970/71	3,318	46,632	49,950	7.2	5,500	25,047	30,547	18.0	1,658	588	665	
1971/72	2,900	40,253	43,153	6.7	6,800	19,828	24,138	17.8	1,483	493	559	
1972/73	3,656	37,212	40,868	8.9	5,350	16,807	22,157	24.1	1,463	452	542	
1973/74	5,198	41,023	46,221	11.3	6,800	22,028	28,828	23.6	1,308	537	624	
1974/75	4,577	33,749	38,326	11.9	7,000	19,139	26,129	26.8	1,529	567	682	
1975/76	5,892	37,906	43,798	13.4	10,000	20,409	30,409	32.9	1,697	538	694	
1976/77	5,908	35,834	41,742	14.2	9,600	18,891	28,491	33.7	1,025	527	682	
1977/78	6,100	37,100	43,200	14.1	10,000	18,000	28,000	35.7	1,639	485	648	
Total cereals:												
1966/67	886	91,300	93,186	1.3	3,788	62,096	65,884	5.7	2,008	680	707	
1967/68	6,036	92,736	98,772	6.1	13,193	69,757	82,950	15.9	2,186	752	840	
1968/69	9,297	89,969	99,166	9.4	18,630	64,970	83,600	22.3	2,004	723	843	
1969/70	11,294	90,153	101,547	11.2	24,900	62,910	87,810	28.4	2,185	698	865	
1970/71	15,387	86,386	101,783	15.1	33,100	63,504	96,604	34.3	2,151	735	949	
1971/72	18,172	81,878	100,050	18.2	34,480	59,227	93,607	36.7	1,892	723	936	
1972/73	22,000	75,020	97,020	22.7	37,362	48,775	86,137	43.4	1,698	650	887	
1973/74	25,828	77,266	103,094	25.1	39,300	55,357	94,657	41.5	1,552	716	918	
1974/75	26,573	67,184	93,757	28.3	41,600	48,211	89,811	46.3	1,566	718	958	
1975/76	32,352	71,375	103,729	31.1	52,840	55,155	107,995	48.9	1,633	773	1,041	
1976/77	33,808	67,403	101,211	33.4	51,800	48,561	100,361	51.6	1,532	720	992	
1977/78	35,100	68,900	104,000	33.8	57,500	50,500	107,500	53.5	1,638	733	1,033	

Sources: Ministry of Agriculture, New Delhi, Area and Production of Principal Crops, 1975/76 issue, Agricultural Attache Grain and Feed Report, February 1978, and calculations by John Parker and Virginia Salley, Developing Countries Program Area.

Table 3-India: Agricultural imports, quantity and value, annual 1970-76, and estimate for 1977.

	Quantity										Value									
	1970	1971	1972	1973	1974	1975	1976	1977	1970	1971	1972	1973	1974	1975	1976	1977	1970	1971	1972	1973
	-- 1,000 metric tons --										-- Million dollars --									
Wheat 1/	3,587	1,907	356	2,230	4,459	7,181	5,832	415	266.6	156.5	28.1	295.8	711.2	1,404.3	846.0	50.0				
Wheat flour	3	6	1	5	1	1	2	3	.6	.8	.2	1.2	.2	.2	0.4	0.4				
Rice 2/	583	540	301	264	110	237	117	15	80.5	84.3	54.3	78.6	39.8	65.5	21.5	2.8				
Corn	6	5	3	2	3	3	4	3	.4	.4	.2	.5	.8	.8	0.8	0.4				
Sorghum	33	2	---	1,188	687	204	534	2	2.2	.2	---	125.7	82.1	31.7	68.0	0.2				
Total Cereals ..	4,212	2,460	661	3,689	5,260	7,626	6,489	438	350.3	242.2	82.8	501.8	834.1	1,502.5	936.7	53.8				
Soybean oil	79	77	66	73	19	4	53	415	27.8	28.0	25.8	31.4	11.0	3.3	34.9	290.0				
Rapeseed oil	---	---	---	28	25	6	11	250	---	---	.1	13.4	11.8	6.3	6.2	150.0				
Palm oil	---	1	1	52	53	18	21	135	---	.2	.2	19.2	17.0	7.6	9.5	70.0				
Other veg. oil ..	---	---	---	1	2	2	21	50	.1	.7	.9	1.2	1.9	1.2	24.9	50.0				
All veg. oils ..	79	78	68	154	99	30	106	850	29.0	28.9	27.0	65.2	41.7	18.4	75.5	560.0				
Cotton	136	156	130	74	14	35	72	150	127.3	150.0	135.7	81.2	29.0	38.3	90.0	285.0				
Wool	25	19	17	10	13	14	15	20	26.2	18.0	17.4	21.1	34.5	27.7	30.0	40.0				
Jute	1	108	54	62	13	76	100	120	.2	24.0	15.0	16.4	2.6	16.0	19.0	27.0				
Sisal	12	8	8	7	2	2	2	2	1.5	1.3	1.5	2.7	1.5	1.1	1.2	1.2				
Dates	79	49	36	58	28	36	38	45	5.4	5.2	4.7	7.4	5.1	7.4	8.5	10.0				
Raisins	6	10	10	9	9	9	10	17	3.8	5.4	5.3	6.1	7.6	6.7	7.5	16.0				
Grapes	17	13	19	10	10	13	14	18	3.5	3.3	4.6	2.9	4.5	5.2	6.0	8.0				
Ory milk	26	39	42	29	35	34	39	55	8.1	16.0	23.4	16.8	28.5	18.9	21.0	45.0				
Butter	4	3	6	4	6	15	21	27	2.9	3.4	4.4	3.1	5.0	15.0	20.0	28.0				
Tallow	70	94	65	59	43	7	25	45	15.7	21.9	12.6	14.9	24.0	3.1	12.5	28.5				
Pulses	4	4	5	6	4	4	5	15	.5	.5	.5	.7	.7	.7	1.0	3.5				
Other	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	83.2	95.9	96.5	99.2	104.7	85.7	78.5	97.0				
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	658.0	616.0	431.4	839.5	1,123.5	1,746.7	1,307.4	1,203.0				

1/ Includes Food Corporation of India imports and some arrivals for international relief agencies.

2/ Excludes border trade with Nepal.

Sources: Monthly Foreign Trade of India, Agricultural Attache Reports, and ERS estimates.

ucts have been completely banned for 1978 and severe limitations placed on exports of peanut meal and other products. Exports of peanuts, cotton, niger seed, fresh fruits and vegetables, and live animals have been banned for 1978.

The ban on exports of fresh fruits and vegetables in mid-1977, limited India's exports of potatoes and onions to Mideast markets and ended a boom that began in 1976. Also, limitations on exports of oilseed products caused reductions in shipments of peanuts and peanut meal. Government policy teams have indicated that exports of certain commodities must be curtailed to prevent inflation and higher prices for the Indian consumer. High prices for cooking oil precipitated the limitations in 1977 on oilseed exports. Peanut exports were limited to 50,000 tons in 1977, following the export of 153,700 tons in 1976. Exports of peanut meal declined from 1,246,000 tons in 1976 to only 736,000 tons in 1977.

Efforts to keep food prices down have also caused a new policy concerning agricultural imports. Since foreign exchange reserves reached \$5 billion in 1977 and are likely to rise through 1978, many barriers to food imports are scheduled to be discarded or revised. Imports of vegetable oils, raw cotton, pulses, and horticultural products are now facing fewer obstacles than they did a year earlier. Larger imports of soybean oil, pulses, almonds, and dried fruit are planned for 1978. Import licenses are easier to get and the limits of value per license have been raised for most food items. This means private importers can make larger orders with less delay.

Imports of vegetable oils increased from only \$75 million in 1976 to about \$550 million in 1977, and cotton imports soared from \$90 million to about \$260 million. Imports of these commodities were curtailed before 1975, even during periods of severe shortage. In previous years, the lack of foreign exchange was the major reason for limiting these imports.

The more comfortable grain situation has caused a sharp reduction in grain imports and even allowed shipments of 700,000 tons of wheat to the Soviet Union. India's grain imports declined from 7.6 million tons in 1975 to about 450,000 tons in 1977. Wheat imports declined from 7.2 million tons (\$1.4 billion) in 1975 to 5.8 million tons (\$846 million) in 1976 and only 415,000 tons (\$60 million) in 1977.

Government grain stocks reached 21 million tons in July 1977 and were 17 million in January 1978. Prices for wheat at fair-price shops were reduced about 4 percent in late 1977 to around 15 cents per kilogram. Grain distribution to fair-price shops increased from 9.2 million tons in 1976 to 11.7 million tons in 1977. A further rise in public

grain distribution is anticipated in 1978, because of rising open market grain prices. There is an increasing priority to provide cheaper food to lower income families through fair-price shops.

U.S. agricultural exports to India declined from a peak of \$774 million in 1976 (\$611 million were cash sales) to \$290 million in 1977. U.S. wheat exports dropped from 3.9 million tons in 1976 to only 185,000 tons in 1977 and value tumbled from \$553 million to only \$19 million. U.S. exports of vegetable oils reached \$155 million in 1977—triple the 1976 value—and cotton exports declined 8 percent to \$50.3 million. Tallow exports to India reached \$11.8 million in 1977—double the previous year. Exports of U.S. almonds to India jumped from \$42,000 in 1976 to \$1.1 million in 1977, as relaxation of import regulations triggered new sales.

Outlook

New agricultural trade policy will have a strong impact on India's exports of farm commodities in 1978. Exports of peanuts will not be allowed; providing an opportunity for the boom in U.S. exports of peanuts to continue. The initial limitation of 250,000 tons of peanut meal for export will probably be revised upward, but 1978 exports are not likely to exceed the 1977 level of 736,000 tons. The ban on exports of live animals, cotton, niger seed, some spices, and fresh fruits and vegetables is likely to continue.

No further large wheat and wheat flour sales are likely in the near term. About 800,000 tons of wheat will be sent to the Soviet Union in 1978 to complete the 1.5 million-ton repayment in kind of the Soviet grain loan of 1973. About 200,000 tons of wheat and 100,000 tons of wheat flour are scheduled for shipment to Vietnam, 50,000 tons of wheat to Afghanistan, and 30,000 tons to Sri Lanka in 1978.

The sale of 50,000 tons of rice to Indonesia in late 1977 caused a temporary concern among world rice trade circles that India might become a new exporter of significance. But this threat faded in early 1978 as the policy to limit farm exports and curtail food prices gained momentum. In 1978, exports of basmati rice, at prices of over \$600 per ton to Mideast markets, are likely to surpass the 30,000 tons delivered in 1977, but the level is not expected to exceed 50,000 tons.

India plans to export 500,000 tons of sugar to the PRC in 1978. Imports from the PRC will consist primarily of tin and other minerals, but some bristles and silk are scheduled to be included in the trade agreement. India's agricultural exports to the United States in 1978 should remain near the 1977 value of \$186 million. Tea, coffee, and spices are the major items.

Table 4.--Exports of peanuts by the United States and India to specified markets, annual 1973-77.

Destination	United States										India									
	January - December										January-December									
	1973	1974	1975	1976	1977	1976	1977	1973	1974	1975	1976	1977								
						Metric tons					1,000 dollars					Metric tons				
United Kingdom.....	9,039	13,633	20,484	12,183	27,630	9,217	20,708	2	20,614	12,540	22,572	11,000								
Netherlands.....	15,014	11,598	29,382	15,001	48,954	8,086	34,233	1,424	28,220	6,317	46,183	8,000								
West Germany.....	5,204	3,259	2,874	2,302	6,799	879	4,854	--	953	412	1,229	1,000								
Denmark.....	--	--	18	--	--	--	--	--	--	--	--	100								
Belgium-Luxembourg.....	384	15,006	865	841	2,840	395	1,561	--	488	--	42	100								
France.....	20,313	43,062	17,636	1,100	8,667	827	5,177	--	--	375	748	500								
Italy.....	11,238	6,896	11,710	5,032	10,727	2,278	5,351	--	--	177	1,211	--								
Ireland.....	--	--	--	--	--	--	--	--	--	--	--	--								
Total EC.....	61,192	93,454	82,969	36,459	105,617	21,682	71,884	1,426	50,275	19,821	71,985	20,700								
Spain.....	2,123	3,344	6,492	6,046	7,302	5,027	5,724	--	--	1,564	3,887	2,000								
Switzerland.....	26,214	48,908	23,358	6,924	56,429	4,824	32,546	--	42	100	--	--								
Sweden.....	40	378	241	349	540	249	489	--	--	--	--	--								
Norway.....	140	1,877	879	676	2,037	466	1,167	--	--	--	475	500								
Finland.....	--	--	--	20	91	13	74	--	--	--	--	--								
Yugoslavia.....	--	--	--	--	--	--	--	5,630	2,401	9,104	7,200	2,000								
Poland.....	2,481	2,358	5,352	2,267	4,169	1,521	2,967	491	929	400	1,005	1,000								
Czechoslovakia.....	160	548	1,912	539	--	379	--	3,844	5,409	5,413	3,188	3,000								
Bulgaria.....	--	--	--	--	--	--	--	755	2,812	2,528	2,799	1,500								
Romania.....	--	--	--	--	--	--	--	--	--	--	2,480	2,000								
Hungary.....	--	--	--	--	--	--	--	--	2,579	498	1,659	1,000								
USSR.....	--	--	--	--	5,699	--	4,481	16,995	18,807	15,112	23,648	5,000								
Japan.....	17,005	9,935	17,706	29,176	25,734	26,536	19,929	83	3,839	4,247	6,126	2,000								
Australia.....	--	--	1,633	79	5,382	45	4,121	--	--	--	--	--								
Venezuela.....	2,961	17,925	28,612	2,529	2,814	2,670	3,460	--	--	--	--	--								
Trinidad.....	263	1,074	1,369	1,366	1,886	935	1,397	--	--	--	--	--								
Canada.....	47,231	47,943	49,164	34,372	46,494	22,846	31,581	--	--	1,674	9,204	2,000								
Iran.....	--	--	--	--	--	--	--	92	177	323	483	1,000								
Iraq.....	--	--	--	--	--	--	--	10	36	62	30	100								
Kuwait.....	--	--	--	--	--	--	--	5	105	152	551	400								
Algeria.....	--	--	--	--	8,205	--	6,067	--	--	--	--	--								
Singapore.....	--	--	129	--	430	--	386	--	--	1,479	10,210	1,000								
Other.....	18,619	5,594	9,549	2,340	15,198	1,539	8,205	1,388	804	5,144	19,292	3,800								
Total.....	173,429	233,338	229,156	123,142	287,977	82,732	195,045	30,719	88,218	67,244	153,537	50,000								
Value, million dollars...	74.6	136.3	139.9	82.7	195.0	--	--	14.3	44.7	40.2	78.2	31.0								
Average price.....	418.09	584.13	610.50	671.58	677.14	--	--	465.51	506.70	597.82	509.32	620.00								

Sources: Bureau of the Census for U.S. exports during 1973-77, Monthly Foreign Trade of India, 1973-76 and ERS estimates.

U.S. agricultural exports to India in 1978 are likely to remain near the 1977 value. Shipments of bulgur wheat, nonfat dry milk, blended foods, and other commodities under Title II, P.L.-480 are scheduled to reach \$100 million in 1978. India's cash purchases of U.S. soybean oil between October 1977 and March 1978 exceeded 100,000 tons, with additional purchases likely. An agreement was signed in January 1978 for shipment of 60,000 tons of U.S. soybean oil to India under Title I, P.L.-480.

If reports of recent policy changes prove correct, India could be a much larger market for

U.S. pulses in late 1978. India recently bought 10,000 tons of lentils from Turkey and much larger purchases are reportedly underway.

The 1978 wheat harvest is expected to be about 1 million-tons above the 29 million-ton crop harvested in 1977. A shift from wheat to pulses in some areas caused a slight reduction in area planted, but higher yields in 1978 are likely to insure another good wheat crop. India has plenty of foreign exchange to make necessary grain imports if a poor 1978 monsoon should cripple rice and coarse grain yields and create the need for larger imports. (*John B. Parker*)

INDONESIA

Agriculture accounts for 36 percent of GDP—major agricultural products are rice, rubber, cassava, corn, tobacco, and palm oil—major agricultural exports are coffee, rubber, palm oil, tea, tobacco, and pepper—major agricultural imports are rice, wheat, and cotton.

Despite a slowdown in agricultural output which necessitated huge grain imports, overall growth of the economy was about 6 percent in 1977, slightly lower than 1976 growth. Inflation was reduced to 10 percent during the year—the lowest level since 1971—as food prices were kept under control through large imports.

The export boom continued in 1977. Oil exports again reached the \$6 billion mark, and non-oil exports expanded from \$2.2 billion to \$2.9 billion, leaving a trade balance surplus of \$3.4 billion. Foreign exchange reserves stood at \$2.7 billion at year's end, compared with \$1.5 billion the previous year and a nearly depleted level at the end of 1975. Reserves would have been much higher were it not for the "Pertamina" financial crisis of 1975 and the accompanying short-and long-term debts, which are still being repaid.

The past 5 years brought a remarkable transformation in the Indonesian economy. The share of agriculture in the GNP has fallen from 45 to 36 percent, with rapid gains in shares of mining, manufacturing, construction, and services. Although the oil bonanza has lessened the need for aid and concessional sales, it has done little to solve the pressing problems of unemployment and food production.

Agricultural Production

Agricultural output during 1977 was down slightly from the 1976 level and virtually on the long-term trend as a serious late summer drought

curtailed rice and corn harvests. For the fourth consecutive year, rice production was short of the Government's target. The main season harvest (April-June) was thought to be relatively good, although some wereng pest (brown planthopper) infestation was reported. But, in many areas, the off-season crop was a failure, principally in those areas where no rain had fallen from July through October.

Rice production for 1977 is tentatively placed at 15.2 million tons, down 4 percent from the 1976 level. It is also nearly 2 million tons short of the target in the Five Year Development Plan.

In an effort to keep the retail price of rice from rising above the predetermined ceiling of Rps. 145/per kg.,¹ the Indonesian logistics agency, BULOG, injects rice into the retail market. During the October-December 1977 period, BULOG was injecting 6,000 tons daily into markets around Jakarta where the rice shortage was most acute. Although injections of this magnitude required huge imports, BULOG's operations during 1977 were considered very successful as measured by the relatively small increase in the CPI. By closely monitoring price fluctuations in the major cities of the country, BULOG could divert both domestic and foreign shipments of rice to areas of short supply. To meet BULOG's requirements to stabilize prices, 384,000 tons of rice were imported during December and additional imports were sought in early 1978.

Drought also curtailed the 1977 corn crop, the only other major grain grown in Indonesia. Output was estimated at only 2.3 million tons, the lowest since 1972, nearly 24 percent below the peak 1974 harvest, and the third consecutive year of decline. While no official estimates of the 1977 cassava crop have been made, estimates indicate it too is down for the third consecutive year. The

¹415 rupiahs equal 1 dollar.

Table 5.--United States: Agricultural exports to India, quantity and value, 1955-77.

Calendar year	Total	Nonfat dry milk	Wheat	Rice	Corn	Sorghum	Bulgur	Cotton ^{1/}	Tallow	Soybean oil	Other
Million dollars											
1955.....	43.9	2.1	8.7	2.4	--	--	--	3.0	--	--	27.7
1956.....	87.1	2.6	35.8	6.6	--	--	--	25.8	--	--	16.3
1957.....	252.9	3.8	177.3	20.4	--	--	--	36.9	--	--	14.5
1958.....	175.9	8.8	144.0	0.1	3.6	3.3	--	11.4	--	--	4.7
1959.....	209.1	10.3	173.6	0.1	6.6	0.5	--	15.1	--	--	2.9
1960.....	425.2	4.7	271.9	49.4	5.6	3.2	--	88.4	--	--	2.0
1961.....	259.8	8.9	149.0	26.4	6.5	--	--	60.2	--	1.0	7.8
1962.....	196.1	6.6	205.4	30.8	3.5	--	--	37.2	--	--	12.6
1963.....	360.9	5.8	247.3	50.0	2.9	--	--	43.4	--	--	11.2
1964.....	480.9	6.4	370.6	44.0	6.3	2.0	--	37.1	--	--	14.5
1965.....	482.4	9.4	353.6	32.2	8.2	3.6	2.5	38.8	9.2	16.9	8.0
1966.....	538.7	14.5	366.8	9.6	7.3	95.4	5.0	16.5	2.1	13.6	7.9
1967.....	529.5	9.3	284.0	--	3.1	86.0	13.6	53.4	18.2	38.8	23.1
1968.....	363.5	5.6	242.9	--	1.0	22.5	7.5	35.2	9.4	19.4	20.0
1969.....	261.7	5.2	124.2	16.9	1.7	13.3	11.9	29.6	12.9	24.6	21.4
1970.....	256.3	4.6	135.0	--	1.2	0.2	10.0	36.3	16.7	33.4	18.9
1971.....	272.3	6.5	80.5	17.8	0.9	0.6	11.9	48.7	31.0	49.3	25.1
1972.....	86.9	4.8	11.0	2.8	1.0	9.1	10.1	2.1	7.8	17.9	28.7
1973.....	333.3	0.1	211.1	--	0.4	71.0	13.2	--	5.9	10.7	20.8
1974.....	454.8	--	372.9	--	0.4	9.3	23.2	--	21.4	17.4	10.2
1975.....	759.9	29.7	610.9	.2	0.1	45.7	41.2	--	--	2.6	29.5
1976.....	773.9	11.3	553.2	24.9	0.0	23.4	30.5	54.8	5.1	28.7	42.0
1977.....	290.6	6.7	19.0	1.2	--	--	28.4	50.3	11.8	134.7	38.5
1,000 metric tons											
1955.....	n.a.	8	140	9	--	--	--	14	--	--	n.a.
1956.....	n.a.	10	632	48	--	--	--	144	--	--	n.a.
1957.....	n.a.	13	2,695	151	--	--	--	207	--	--	n.a.
1958.....	n.a.	31	2,256	--	71	79	--	63	--	--	n.a.
1959.....	n.a.	41	2,804	--	126	11	--	91	--	--	n.a.
1960.....	n.a.	17	4,411	336	106	53	--	629	--	--	n.a.
1961.....	n.a.	35	2,414	193	144	--	--	407	--	3	n.a.
1962.....	n.a.	32	3,055	224	71	--	--	238	--	--	n.a.
1963.....	n.a.	28	3,813	334	55	--	--	271	--	--	n.a.
1964.....	n.a.	29	5,713	276	116	25	--	237	--	--	n.a.
1965.....	n.a.	30	5,748	220	142	76	22	227	41	62	n.a.
1966.....	n.a.	37	6,029	63	110	1,987	43	102	13	42	n.a.
1967.....	n.a.	22	4,557	--	57	1,166	128	360	117	145	n.a.
1968.....	n.a.	13	3,984	--	17	455	72	209	70	92	n.a.
1969.....	n.a.	10	2,078	102	32	295	121	198	88	105	n.a.
1970.....	n.a.	8	2,323	--	21	3	117	236	86	114	n.a.
1971.....	n.a.	9	1,317	92	13	10	127	295	152	157	n.a.
1972.....	n.a.	7	165	13	19	1	87	10	39	49	n.a.
1973.....	n.a.	--	1,836	--	3	917	74	--	17	23	n.a.
1974.....	n.a.	--	2,405	--	3	87	100	--	49	22	n.a.
1975.....	n.a.	24	4,199	--	--	372	195	--	--	3	n.a.
1976.....	n.a.	9	3,890	92	--	215	140	139	14	51	n.a.
1977.....	n.a.	4	185	6	--	--	162	137	24	221	n.a.

^{1/} Quantity shown in 1,000 running bales.

Source: Bureau of the Census, U.S. Department of Commerce

sugar crop rose slightly to 1.05 million tons, still slightly short of domestic requirements.

The recent upturn in palm oil production is one of the brightest aspects of Indonesian agriculture. Oil palm growing is done almost entirely by estates and about 70 percent of the area is under Government ownership. The expansion of oil palm area, which started in the early 1970's—primarily from cultivation of new lands and, to a lesser extent, the displacement of rubber area—is now rapidly rising in production. Total output for 1977 is estimated at 500,000 tons, 15 percent above 1976. With production now primarily for export, the recent shortfall in domestic copra production and commensurate downturn in coconut oil availability, will result in a higher percentage of palm oil processed for domestic consumption.

Copra production declined about 5 percent to 1.5 million tons in 1977, as bad weather and further aging of coconut trees more than offset efforts to rehabilitate the coconut industry by replanting with new hybrids. It will take several years before the new seedlings begin to produce enough to generate an uptrend in copra output. Until then, the country must import copra to fill the increasing coconut oil deficit or switch to using more palm oil.

Rubber production was slightly higher in 1977, although some rubber area has been displaced by oil palm. Pepper output, at 32,000 tons, increased slightly from the 1976 level, while tobacco production advanced modestly to 126,000 tons. In response to much higher prices, coffee production increased slightly to 177,000 tons.

Agricultural Trade

Export values of the major agricultural export commodities in Indonesia showed appreciable increases over 1976 values. Projected levels for calendar year 1977 based on 9-month estimates are: coffee, \$676 million—up 70 percent; rubber, \$557 million—up 4 percent; palm oil, \$178 million—up 25 percent; tea, \$126 million—up 129 percent; tobacco, \$69 million—up 77 percent; and pepper, \$61 million—up 33 percent. Substantially higher prices and slight quantity increases accounted for these larger increases.

Comparable import value data were not available at publication time; limited quantity estimates exist, however, for some commodities. Indonesia imported about 2 million tons of rice in 1977, about one-fourth of world rice trade. About half of this was supplied by Thailand, with the United States, Burma, the People's Republic of

China, Taiwan, and Pakistan supplying most of the remainder. More than 800,000 tons were received the last 3 months of 1977, with most of it purchased commercially.

Wheat imports continued to climb and are estimated at 1.07 million tons for 1977. Australia and the United States furnished the bulk of the wheat, with Canada also shipping significant quantities. Cotton imports were estimated at 330,000 bales for 1977. The United States was the only major supplier, with at least 29 other countries supplying lesser amounts ranging from PRC's 20,000 bales to Australia's 104 bales.

U.S. agricultural exports to Indonesia were slightly higher in 1977 at \$242 million, and again were dominated by rice, cotton, and wheat. Somewhat lower prices and increased competition from Thailand caused the value of U.S. rice exports to decline to \$70.5 million, despite Indonesia's rising import needs. U.S. wheat exports actually climbed 24 percent in volume, but declined 10 percent in value to \$50 million. Value of cotton exports were up sharply to \$65 million, as quantity and value both made good gains.

U.S. agricultural imports from Indonesia jumped 55 percent to \$628 million, as rubber imports rose to \$310 million and coffee imports more than doubled to \$223 million. Coffee imports from Indonesia, however, declined 21 percent during the year. U.S. imports of pepper (\$33 million), tea (\$28 million), and palm oil and palm kernel oil (\$19 million) were all up from the 1976 levels.

Outlook

Indonesia's success during 1978 will largely be determined by the magnitude of its petroleum revenues and its rice crop. The former is likely to be at or above the 1977 level, although the longer term oil situation is much less certain. Indonesian authorities are concerned that the drought and pest problems of the past 3 years will continue and adversely affect the 1978 rice crop. Soil moisture reserves are depleted in many areas following the long summer drought. Wereng pest problems have already been observed in the recently planted 1978 crop. Barring further adversities, a rice harvest of 16 million tons is still reasonable. Nevertheless, rice imports will be especially heavy during early 1978 and should reach 2.5 million tons. The United States should furnish larger quantities since the amount of Thai rice available for export in 1978 is limited. Wheat imports will likely reach 1.2 million tons in 1978. (*E. Wayne Denney*)

JAPAN

Agriculture accounts for 5.6 percent of GNP—major agricultural products are rice, vegetables, eggs, pork, and citrus—major agricultural exports are mandarin oranges and dried mushrooms—major agricultural imports are feed grains, cotton, soybeans, wheat, and sugar.

Real growth in the Japanese economy slowed to 5.3 percent in 1977 after official assurances that a rate of 6.7 percent would be attained. After rapid economic expansion in the first half, there was a lull at mid year with weaknesses principally in the areas of private consumption and business-fixed investment. Other economic indi-

cators showed relative improvement or were unchanged (see table).

The Government was under a great deal of international pressure during the year to reduce its rapidly growing merchandise trade surplus which stood at \$17.6 billion at the end of 1977. The current account surplus stood at \$11.1 billion and the overall balance of payments surplus was \$7.8 billion in December. Trade with the United States was in surplus \$7.4 billion, compared with \$5.3 billion in 1976. Foreign exchange reserves increased to \$23.8 billion by the end of 1977, with much of the increase attributable to official efforts to prop up the U.S. dollar in the closing months of the year. The U.S. dollar fell 18 percent against the yen—from 293 at the beginning

Table 6 Japan: Economic indicators, 1973-77

Economic indicator	1973	1974	1975	1976	1977 ^{1/}
	<u>Percentage change from previous year</u>				
Real GNP.	9.8	-1.3	2.5	6.0	5.3
Retail prices	11.8	24.4	11.8	9.3	8.6
Wholesale prices.	15.8	31.4	3.0	5.5	2.6
GNP deflator.	11.6	20.6	7.4	6.4	7.2
Real wages and salaries	7.7	2.4	3.2	3.1	1.3
Unemployment rate	1.3	1.4	1.9	2.0	2.0
Balance of payments, overall. .	-10.1	-6.8	-2.7	2.9	7.8
Foreign exchange reserves . . .	12.2	13.5	12.8	16.6	23.8
	<u>Yen per dollar</u>				
Exchange rate	272	292	297	297	271

^{1/} Based on Jan.-Oct. 1977.

Source: Economic Planning Agency, Japanese Government, Japanese Economic Indicators, Dec. 1977.

of the year to 240 at year's end. Half of the total depreciation occurred in the last quarter of the year.

In an effort to reduce its trade surplus and to head off threats of protectionism from the United States and the European Community, Japan adopted policies (1) to stimulate domestic consumption so that a greater volume of imported goods could be absorbed by the economy and (2) to reduce trade barriers that had effectively restricted or eliminated foreign access to Japanese markets.

To stimulate the domestic economy, expansionary fiscal and monetary policies were implemented. The 1977/78 national budget was increased over the 1976/77 budget by 17 percent to about \$100 billion. A supplementary budget of \$7.5 billion which was approved in late 1977, was designed to turn around the stagnating economy. Most of the increases were earmarked for public works expenditures and Government housing loans. The official bank discount rate was reduced on four occasions from 6.0 to 4.25 percent, with other interest rates following suit. The reserve requirement ratio on deposits of commercial banks was also reduced.

To encourage imports, the Government announced, in early December 1977, that an eight-point program aimed at reducing the country's trade surplus would be implemented. Some specific plans were to reduce tariff rates, expand import quotas, increase import financing, promote stockpiling, and step-up purchases of crude oil, nonferrous metals, uranium ore, naphtha, and grains, and to double official development assistance over the next 5 years.

Japan's major trading partners found that neither its efforts to stimulate the domestic economy nor its efforts to increase imports were sufficient. More drastic concessions were called for, culminating in the U.S.-Japanese trade agreement signed on January 13, 1978. Although the agreement was bilateral in nature, it was multilateral in its implications by setting a tone that would affect all of Japan's trading partners.

Agricultural Production

Growing conditions in Japan were much more favorable in 1977. Crop production was up 6.6 percent in 1977, compared with a drop of 6.7 percent in 1976. Livestock production continued to increase at a faster rate: 8 percent in 1977, compared with 2.4 percent in 1976. Total agricultural production was up 7.0 percent and per capita agricultural production was up 5.8 percent over the previous year. Despite yearly improvements, total Japanese agricultural production in 1977 was only 17 percent above the base period of

1961-65. Per capita agricultural output was slightly below the level for the base period, indicating that population growth increased at a slightly faster rate than agricultural production.

Despite a slight decline in paddy and upland rice acreage, rice production increased 11.2 percent in 1977 to 13 million tons (brown basis) but still slightly below 1974 output. Yields of 4.7 tons per hectare were above average in 1977 because of more favorable weather conditions and less insect damage.

In July 1977, the Government increased the purchase price of rice 4.6 percent to \$1,066 per ton (brown basis) and raised the resale price to wholesalers 9.8 percent to \$908 per ton. By raising the resale price at a faster rate than the purchase price, the Government hoped to reduce the financial burden of the rice program on the national budget. The Government spent \$370 million in fiscal 1977 (April 1977- March 1978) to divert rice acreage to other crops with the hope of reducing rice output by 900,000 tons. Next fiscal year an additional \$780 million will be spent to reduce output by another 1.7 million tons to a level of 11 million to 12 million tons.

Total rice consumption has continued to fall since 1971 by an average of 2.8 percent per annum. The Government tried to slow its decline by promoting rice in school lunch programs and by adding rice flour to wheat flour in the manufacture of bread and noodles. From time to time the resale price of wheat and rice have been adjusted by the Government.

In 1975 and 1976, the average resale price of wheat was increased faster than that for rice—26.3 percent for wheat, compared with 13.5 for rice—making rice relatively less expensive, thereby encouraging its consumption. In the last few years, manipulation of the relative resale price of wheat and rice has slowed declines in rice consumption and increases in wheat consumption. As of November 1, 1977, rice carryover stocks were about 3.67 million tons (brown basis) and are expected to climb to 4.6 million by October 1978.

Profits in domestic livestock production rose in 1977, especially in the last months of the year, as average feed prices dropped about 5 percent during the August-December period. Production and inventories of all major livestock categories were up as of February 1, 1977.

According to the February survey, hog and broiler numbers increased 9.0 and 10.8 percent from a year earlier. Hog prices reached a high in June, then fell 13 percent by December. Feeder pig prices reached a high of \$97 in March and stabilized at a level of about \$80 a head in late 1977.

Beef producer prices fluctuated around \$1.50

Table 7 Japan: Agricultural production 1/, 1976 and 1977

Commodity	1976	1977 <u>2/</u>
	<u>Thousand metric tons</u>	
Rice.	11,773	13,094
Vegetables.	13,112	12,740
Eggs.	1,860	1,878
Pork.	1,056	1,165
Milk.	5,266	5,700
Poultry	701	775
Beef and veal	298	360
Tobacco	176	174
Citrus.	3,755	4,053
Other fruit	724	757
Potatoes.	3,742	3,500
Tea	100	105
	<u>Percent change from previous year</u>	
Total	-6.7	6.6
Total livestock	2.4	8.0
Total agriculture	-5.2	6.9
Per capita agriculture.	-6.3	5.8

1/ These 12 items represent approximately 96 percent of total value for agricultural production.

2/ Preliminary estimate.

per pound during the year. Inventories of beef cattle showed a 3.9 percent gain over the previous year. Egg and milk prices showed strength in the latter part of the year. Dairy animals and layer numbers were up 4.3 percent and 2.7 percent, respectively.

Profits in domestic livestock production were bolstered by protectionist trade policies and tight fish supplies, forcing up prices of fresh and processed fish products at a faster rate than other meat items. During the January-October 1977 period, household purchases of beef, processed beef products, and pork increased 4.4 percent, 27.7 percent, and 3.9 percent, respectively.

Acreage devoted to Mikan orange production declined 3.3 percent in 1977; however, production increased 15.0 percent—from 3.09 million tons in 1976 to 3.54 million in 1977.

The cotton spinning and textile industry continued to slump in 1977. The chemical fertilizer industry was similarly depressed. Phosphates and compound fertilizer makers decided to scrap 20 percent of their facilities for making phosphoric acid because of sagging demand and growing imports of intermediate raw materials. Phosphatic and compound fertilizers account for 80 percent of domestic fertilizer consumption.

Agricultural Trade

Japan continued to rely heavily on agricultural imports to meet its basic food needs. Total volume of agricultural imports increased 11 percent, with substantial increases in volumes of feed grains, sugar, and citrus fruit which offset declines of coffee and pork. Total value of agricultural imports was down 9.2 percent to about \$10.5 billion, as declining unit values of feed grains, wheat, and sugar more than offset increases in unit values of soybeans, citrus fruit, cotton, and coffee.

As in previous years, the most important agricultural imports in 1977 were feed grains which increased about 12 percent over the 1976 level. The United States supplied over 10 million tons or 61 percent of these feed grain imports. For the third year, this fulfilled the Butz-Abe understanding, in which the United States promised to supply and Japan to purchase 8 million tons of feed grains annually for 3 years.

Argentina increased its share of total feed grain imports from 7.8 percent in 1976 to 14.7 percent in 1977, by more than doubling its exports of grain sorghum to Japan. Average c.i.f. unit values of Argentine sorghum were significantly below those of U.S. sorghum. Other important feed grain suppliers during 1977 were (in million tons): Australia (1.5), Canada (1.0),

South Africa (0.8), and Thailand (.5). Although the United States and Argentina increased their share of feed grain imports, all other major suppliers showed declines in 1977.

Government policy continued to protect the domestic livestock industry with import quotas on beef and veal, a high tariff on poultry, and a variable levy on pork. Imports of pork were down 26 percent in 1977; beef and veal imports were down, as Japan's import quota was reduced from 104,000 tons in Japan fiscal year (JFY) 1976 to 90,000 tons in JFY 1977. Poultry imports, mainly chicken parts, were up 24 percent.

Sugar imports increased 11 percent in 1977. Japan has concluded long-term contracts with Australia, Cuba, South Africa, Thailand, Brazil, and Taiwan. The 1975 agreement with Australia obligated Japan to buy 600,000 tons of Australian sugar annually for 5 years at a fixed price. At the time of the agreement, the fixed price was half the world price, but in 1977 it was about twice the world level. As a result, Japanese sugar refiners, faced with bankruptcy, refused to buy any more of the high priced Australian sugar at midyear. In late October, an agreement was worked out leaving 75 percent of the sugar under fixed prices and placing 25 percent under variable prices.

Total wheat imports were down 2.6 percent in 1977. The overall decline was mostly attributed to the dampening effect of a 34-percent increase in the Government's resale price of wheat in 1976. The United States, nevertheless, increased its relative share and absolute volume. Other suppliers were Canada and Australia.

Soybean imports rose by only 1.4 percent in 1977. Sluggish demand for soy oil made Japanese crushers reluctant to crush, avoiding excessive oil stocks. Formula feed producers, therefore, imported record volumes of soybean meal to make up the deficit. Imports of soybean meal increased 63 percent, with 77 percent of the total coming from the United States and the rest from Brazil. Soybean meal utilization was up nearly 10 percent, reflecting increases in overall formula feed production as well as increases in its relative share of the total.

Cotton imports were down 2.5 percent in 1977, reflecting continued structural problems in the Japanese cotton spinning and textile industries. Tighter supplies in other countries and competitive prices allowed the United States to increase its share of total raw cotton imports from 26 percent in 1976 to 32 percent in 1977. Other important suppliers were Latin American countries (25 percent) and the Soviet Union (17 percent).

Table 8 - Japan: Imports of principal agricultural commodities 1/,
1976 and 1977

Commodity	1976	1977	1976	1977
	1,000 tons		Million dollars	
Feed grains <u>2/</u>	14,616	16,337	1,925	1,886
Raw cotton.	668	651	909	1,139
Soybeans.	3,554	3,602	840	1,091
Wheat	5,827	5,676	1,052	738
Sugar	2,439	2,708	962	716
Coffee beans.	148	134	339	653
Pork.	149	110	406	328
Tobacco	98	83	315	297
Cattle hides.	281	250	264	249
Bananas	832	825	161	164
Citrus fruit.	268	288	125	141

1/ Represent approximately 70 percent of total value of agricultural imports.
2/ Corn, sorghum, barley, oats, rye and millet.

Source: Japan Customs Bureau.

Outlook

Japan's economy appears to be heading for an expansion in 1978 that will exceed the 5.3 percent real growth of 1977. Persistent pressures from the United States and other trading partners have forced Japan to make such a commitment. The U.S.-Japanese trade agreement, signed on January 13, 1978, outlined measures that Japan intends to carry out. Among them is a 20-percent increase in governmental expenditures which will hopefully bring about a real economic growth rate of 7 percent in the coming year. Many observers, however, think that such a rate is too optimistic. The combination of these measures

and the continued strength of the yen are expected to help shrink the current account surplus from \$11.1 billion in 1977 to \$8.0 billion in 1978.

Agricultural trade will continue to be very important to Japan, although total value of agricultural imports may drop 5 to 10 percent. Unit values of wheat, corn, sorghum, soybeans, soybean meal, and cotton, which together account for over 45 percent of Japan's agricultural imports, are all expected to decline substantially during the year. Increased unit values of feed grains and soybeans are not expected to be sufficient to offset declining unit values for other commodities.

Japan's efforts to reduce its trade surplus and specific provisions in the U.S.-Japanese trade agreement should stimulate no more than \$100 million of increased agricultural imports from the United States and other countries. Japan's program for stockpiling grains and soybeans will amount to about \$20 to \$25 million in additional trade of these commodities in 1978. Expanded import quotas of fresh oranges, citrus juice, and high quality beef specified in the January 13 accord are expected to increase the value of agricultural imports by another \$30 million to \$40 million

in 1978.

Domestic agricultural policies will continue to center on rice production and the large carryover expected by the end of 1978. The Government might try to alleviate the surplus rice problem by again adjusting the wheat resale price which is already about twice the c.i.f. price. Efforts will be continued to divert rice acreage toward the production of other crops, principally wheat, barley, and forage crops. Both of these policies could have marginally negative effects on imports of certain agricultural products. (*William T. Coyle*)

DEMOCRATIC KAMPUCHEA (CAMBODIA)

In 1977, the economy of Democratic Kampuchea (Cambodia) made a small step forward. Both imports and exports increased significantly, but imports—largely PRC financed—far exceeded exports. The agricultural sector suffered delays due to dry weather throughout Southeast Asia and the final size of the harvest remains uncertain.

Agricultural Production

At year's end, the official agricultural claim was that the 1977 rice harvest, on increased area, exceeded that of 1976 and was much better than ever before. However, the weather does not support such an optimistic view. Earlier in the year, rubber production was reported to be doing better than planned; but no reports were made on year-end production.

As elsewhere in the region, rainfall in May, June, and July was favorable; it was late, sporadic, not well distributed, and generally insufficient for crop production. However, heavy rains in the middle of the rainy season (August and September) should have been beneficial to the main rice crop and subsidiary crops.

Optimistic year end claims probably reflect official anticipation that the main, rainy-season rice and subsidiary crops—harvested from November through February—will make up any losses suffered by the early, late, and dry season rice crops.¹ The 1977 official year end rice claims probably will be gradually deflated to more reasonable levels during 1978, as was the 1976 claim of a 150,000-ton rice surplus.

¹There are four potential rice crops; three grown during the rainy season (May-October) and the fourth during the dry season (November-April). The first—early crop—is double-cropped with the third—late crop—or the fourth—dry season crop. The second—rainy season crop—is still the largest crop and is single-cropped.

The so-called 1976 rice "surplus" was largely used to increase 1977 domestic food supply. Although to have surplus rice for export remains a goal, an amount of rice in the thousands, not hundred thousands, of tons was exported in 1977. Production is not yet adequate to support significant rice exports.

Agricultural Trade

Through its Hong Kong trade offices, Cambodia made \$8.4 million worth of purchases—mostly from Japan—during the first half of 1977. This value was more than three and a half times 1976 imports of \$2.3 million. Imports from the West are largely non-agricultural and support agricultural development directly—small tractors and water pumps—or indirectly—medicines—or help modernize a particular export industry, such as rubber. Exports are largely agricultural products—mostly rubber. However, the deficit of imports over exports remains extremely large. There was no known trade with the United States in 1977.

Bilateral trade agreements have been signed with North Korea and the PRC for 1978; other socialist nations are expected to conclude trade agreements in 1978. The balance and composition of this trade is unknown.

Outlook

In 1978, imports and exports are expected to continue to increase, with a gradual declining imbalance, as the small Cambodian export earnings begin replacing interest-free PRC loans in financing total trade. Given the policy of militant self-reliance and the reluctance to import food, it is unlikely that requests for food aid will be made if the 1977 harvest were to be worse than that in 1976. Reduced rice rations would probably follow. (*Carolyn L. Whitton*)

NORTH KOREA

The year 1977 was designated a "year of readjustment" for the North Korean economy after failure to complete the six-year plan targets in 1976. Overall growth of the economy in 1977 was slow, hampered in part by a large foreign debt.

Agricultural Production

In 1977, officials reported that grain production was 8.5 million tons, 6-percent more than the 8 million tons reported for 1976. As usual, no breakdown was given for this total, which is presumably an unmilled weight and includes pulses, soybeans, and perhaps potatoes in addition to wheat, rice, and coarse grains. Production of rice and corn, the predominant grain crops, reportedly increased. An extensive irrigation system, which covers most of the country's croplands, limited the effects of a severe spring drought and below-normal rainfall for much of the year.

Agricultural Trade

By the end of 1976, North Korea had piled up a hard currency debt estimated at \$1.4 billion, approximately 6 times the value of its hard currency exports of recent years. Additionally, an estimated \$1 billion is owed to communist countries. The country has defaulted on part of its debt

repayments and has reportedly been unable to make interest payments during 1977 on part of the rescheduled debt. This has caused partial cutoff of credit from western suppliers of machinery and other industrial goods.

North Korean imports, consisting mainly of machinery and equipment and smaller amounts of fuels and grains (mainly wheat), were down sharply in 1976 and appear to have remained stagnant in 1977. Exports, primarily metallurgical products, minerals, and foodstuffs—mainly grains (several hundred thousand tons of corn and rice) and fruits and vegetables—have not risen appreciably, so the trade deficit was not completely eliminated in 1977.

Outlook

The North Korean plan for 1978, the first year of a new 7-year-plan (1978-84), calls for a 3.5-percent increase in grain production to 8.8 million tons. The plan also calls for completing the irrigation system for dryland crops during the year. Imports will continue at reduced levels because of the country's ongoing debt problems. Partially in response to pressures to increase exports, an export goal for the year of 500,000 tons of rice has been announced. If met, this would be a record, well above the 200,000 to 300,000-ton level of recent years. (*Frederic M. Surls*)

REPUBLIC OF KOREA

Agriculture accounted for about one-fifth of the GNP of \$31.4 billion in 1977—major agricultural products are rice, vegetables, barley, and tobacco—major agricultural exports are tobacco, silk, meat, ginseng, and vegetables—major agricultural imports are cotton, wheat, corn, sugar, cattle hides, and soybeans.

South Korea's economy flourished in 1977, with a 10-percent real GNP growth and great improvements in its foreign trade position. Korea had a slight surplus in its balance of payments in 1977, estimated at \$50 million. Total exports increased 28 percent in 1977 to \$10 billion, while imports rose 25 percent to \$10.5 billion. Substantial repayments were made on foreign loans. Yet, large construction projects in OPEC countries allowed Korea to have a favorable balance of payments.

Expanding exports of textiles, ships, electronics, footwear, and steel provided more jobs. Per capita

GNP increased from \$700 in 1976 to \$864 in 1977. The inflation rate was held to 10 percent, partly through Government programs that fixed prices of many basic items.

Import restrictions were lifted for 200 items in 1977, while ceilings were raised for 13 other items. Raw materials used in manufacturing will be easier to import in 1978 because of recent policy and import regulation changes.

Agricultural Production

Korean agricultural output increased about 2 percent in 1977, despite a 54 percent decline in barley production. A severe winter and dry spring crippled yields of barley (the second major crop) and wheat in 1977. Barley production declined from 1.8 million tons in 1976 to only 814,000 tons in 1977. Wheat production declined 46 percent to only 45,000 tons in 1977.

In contrast, improved technology and good growing conditions in the summer enabled farmers to attain a 15-percent gain in rice production

with only a 1 percent increase in area. About half the cropland is planted in rice. Output of rice in 1977 reached 6 million tons—up from 5.2 million in 1976. Greater use of Tongil, other high yielding varieties, and more fertilizer contributed to improved yields. Government procurement prices of more than \$500 per ton also bolstered the incentive of farmers to follow recommended practices. Rice plants are now started in greenhouses and then set in the fields in May and June.

Most farmers receive over \$2,300 per acre (\$5,700 per hectare) from sales of rice or tobacco. Tobacco production increased 29 percent in 1977 to a record 144,532 tons. This level included a 21-percent increase for flue-cured tobacco to 92,500 tons and a 47 percent increase for burley tobacco to 51,600 tons. Slightly over a third of the tobacco crop is exported.

Mushroom output increased 4 percent to 36,000 tons; ginseng production also increased. Restrictions on exports of wild ginseng from U.S. forests will cause higher prices and may make new export opportunities for Korean ginseng.

Korean silk exports declined in 1977, because of rising competition in the Japanese market from other suppliers, particularly the PRC. Korean output of silk declined 24 percent in 1977 to 32,000 tons.

Greater use of improved varieties "Kwangkyo" and "Suwon 83" contributed to an 8-percent rise in soybean production in 1977 to 319,000 tons. New varieties also helped boost corn production 33 percent to a record 113,000 tons.

Imports of dairy cattle increased markedly in 1977. Total cattle numbers increased to a peak of 1.7 million head in June 1977—6 percent above the January 1, 1977 level.

Meat production continued to expand in 1977 because of strong consumer demand. Pork output reached 122,000 tons and poultry output increased 18 percent to 71,000 tons. Beef production rose 9 percent to 83,000 tons as new areas of hilly land were developed in 1977 for pastures.

Agricultural Trade

Total agricultural imports increased 18 percent in 1977 to about \$1.5 billion. The United States provided about 70 percent of South Korea's agricultural imports in 1976, but only 61 percent in 1977. Cereals accounted for about a fourth of total agricultural imports and cotton 22 percent. Imports of soybeans, tobacco, cattle hides, and bird feathers increased markedly in 1977. Larger imports of rubber from Southeast Asia, sugar from Australia, and cattle hides from Canada and Australia accounted for some of the erosion

in the U.S. share of this market.

The United States supplied 95 percent of Korea's cotton imports, which increased 4 percent in 1977 to 218,000 tons valued at about \$340 million. Turkey, Mexico, and Egypt were other suppliers. Available stocks of imported cotton from previous years limited 1977 imports, but 1978 cotton imports are expected to reach 260,000 tons of which 195,000 tons are to be used in the production of textiles for export.

Wheat imports increased 4 percent in 1977 to about 2 million tons; the United States supplied 98 percent, with lesser amounts furnished by Australia and Canada. Corn imports reached 1.4 million tons in 1977 - up 45 percent over 1976. Smaller arrivals of corn from Thailand caused the U.S. share of corn imports to exceed 90 percent, in contrast to 86 percent in 1976. Total rice imports declined sharply from 167,000 tons in 1976 to 64,000 tons in 1977. No rice imports are planned for 1978 since Government stocks now total 2.3 million tons.

Soybean imports, all from the United States, increased 7 percent in 1977 to 150,000 tons, valued at \$44 million. Further gains are likely for 1978. Imports from sources other than the United States have been indicated for 1978.

South Korea's agricultural exports increased from \$308 million in 1976 to about \$363 million in 1977—a gain of 18 percent. Raw silk exports declined from \$119 million in 1976 to about \$100 million in 1977. With exports to Europe and Japan rising rapidly, tobacco may surpass silk as the leading agricultural export in 1978.

Exports of U.S. farm products to South Korea reached a record \$919 million in 1977—up 10.8 percent from 1976. Strong gains in the export value of cotton, barley, cattle hides, tobacco, dairy cattle, and bird feathers, and moderate climbs in the export value of corn and soybeans contributed to the increase.

U.S. cotton exports increased from 837,000 to 932,000 running bales between 1976 and 1977 and the value rose 23 percent to a record \$315 million. Tobacco exports increased 66 percent in value to a record \$2.2 million. U.S. exports of cattle to Korea jumped from \$1 million in 1976 to almost \$8 million in 1977. The export value of bird feathers increased from \$1.2 million in 1976 to \$13.7 million in 1977. Gains were tempered by declines of wheat and rice.

U.S. wheat exports to Korea declined 5 percent to 1.8 million tons in 1977 and lower prices caused the value to decline from \$250 million in 1976 to \$202 million in 1977. U.S. rice exports declined from \$39 million to \$12 million as the quantity fell from 65,000 to 59,000 tons.

U.S. exports of barley to Korea jumped from

only 2,000 tons in 1976 to 475,000 tons in 1977, valued at \$39 million. Australia also exported some barley to Korea.

Strong gains occurred in 1977 exports of pork, canned mushrooms, and other processed foods. Meat exports reached \$49 million - up from \$34 million in 1976, because of larger pork shipments to Japan. Exports of canned mushrooms reached \$49 million in 1977—up from 35 million in 1976. Larger shipments of mushrooms went to the United States, EC, and the Mideast. South Korea sold 70,000 tons of rice to Indonesia in late 1977. Some of this sale will be delivered in early 1978. Further hikes in world rice prices might encourage Korea to make some small additional rice exports.

Outlook

A rebound in barley production is expected in 1978. However, further gains in rice production will be difficult. Rice area is not expected to

increase and growing conditions are not likely to be more favorable than the ideal scene of 1977.

Greater rice use—planned to reduce large stocks—could cause a reduction of 300,000 tons in wheat consumption. Rising world wheat prices would probably encourage Korea to increase wheat imports to build up stock levels which were only 220,000 tons in January 1978.

A booming demand for meat will probably increase corn imports for animal feed. More soybeans will be imported because of rising use of soybean meal.

Further gains in U.S. exports of cotton, corn, cattle hides, tobacco, and soybeans, are expected in 1978. The total value of U.S. agricultural exports to Korea is likely to approach \$1 billion in 1978.

South Korea's 1978 total agricultural imports could reach \$1.7 billion. Larger exports of tobacco and meat could push the value of South Korea's farm exports to \$400 million in 1978. (*John B. Parker*)

LAO PEOPLE'S DEMOCRATIC REPUBLIC

In 1977, the Lao People's Democratic Republic (LPDR) moved towards increased socialization of its economy. Major industrial and agricultural directives were made on cooperative organization. Particularly pertinent to the agricultural sector was the enforcement early in the year of the new agricultural tax for State procurements of grain and other commodities. However, the dominant factor in both agriculture and trade in 1977 was the severe drought that hit the LPDR during most of the rice growing season. The drought, coupled with the closing of the Lao/Thailand border for several months in mid-year, plunged the economy to a near standstill and resulted in a request for international food aid in 1978.

Agricultural Production

Agricultural reports early in the year emphasized the country's successful policy of increasing agricultural production by expanding cultivated area and increasing double-cropping of rice during the dry season (November-April). Initially, planted rice area was reported to have increased. However, by June, the severity of the drought was evident with rainfall only a fourth to a third of normal in the south and central provinces along the Mekong River—the main rice producing areas.

In many areas, rice seedlings died before transplanting or were not planted at all after the land was prepared. Peasants were directed to replace withered seedlings, even if loans of seed from the state were required (thus depleting the limited stock of state seeds) and to plant rice in areas closer to water sources, hence risking flood damage later in the season if rains occurred. By July, direct sowing without transplanting was also being encouraged. However, officials admitted that many areas still lacked the organization and confidence to adequately mobilize peasants to carry out these programs.

Typhoons in August flooded much of the surviving rice. As a result, peasants were encouraged to increase dryland acreage of subsidiary, starchy food crops such as taro, potato, and corn. The LPDR then requested, through the United Nations Development Program, 367,500 tons of international rice aid before March 1978 when the 1977 crop supply was estimated to run out. The amount of aid needed later decreased, but remained substantial.

At year's end, claims of successful 1977 agriculture were confined to extension of the irrigated and cultivated areas and increased production of subsidiary foods such as taro, corn, fish, and fruit. However, these increases did not make up for the

large rice deficit. Officials admitted that rice had been grown successfully with rain water on no more than 80 percent and as little as 25 percent of the hectareage planted, depending on the location.

Foreign Agricultural Aid and Trade

Since the appeal for aid in fall 1977, several western nations, voluntary agencies, and the FAO have given or promised roughly \$4 million of financial and product aid for 1978 delivery. The Socialist nations are expected to provide additional aid during their annual bilateral trade and economic cooperation negotiations in 1978. However, the aid so far known to be committed falls short of the amount requested.

Small amounts of international trade occurred

when the sea access across Thailand reopened. Trade with the United States was negligible.

Outlook

In 1978, the food supply will be very tight. To meet the goal of rice self-sufficiency in 2 years, greater efforts must be put into support and organization of agriculture, expansion of irrigation, and increased double-cropping. International aid, such as the World Bank irrigation project agreed upon late in 1977, will still be needed to support the agricultural sector. It is likely that the economy will remain sluggish. Exports of timber, which are again permitted to pass through Thailand, should provide part of the necessary foreign exchange needed to pay for oil and machinery imports to modernize the industrial sector. (*Carolyn L. Whitton*)

MALAYSIA

Agriculture accounts for 29 percent of GDP—major agricultural products are rubber, palm oil, and rice—major agricultural exports are rubber and palm oil—major agricultural imports are wheat, rice, sugar, and tobacco.

Following its strong recovery in 1976, the Malaysian economy made further gains in 1977. Real GNP grew by 8 percent and inflation was held to 4 percent. Growth was stimulated by the strong external demand for Malaysia's primary commodities, with exports climbing 14 percent. Per capita GNP was nearly \$1,000.

Prices for tin, rubber, and especially palm oil remained high throughout the year. Although tin set new price records almost daily, volume of exports actually declined.

Export receipts reached \$6.15 billion in 1977, following a sharp upturn in 1976. The 1977 level more than tripled the 1970-72 average. High prices for the commodities mentioned and an 18 percent increase in the country's oil production to nearly 200,000 barrels per day were responsible for Malaysia's \$1.17 billion trade surplus. Foreign exchange reserves at year's end stood at nearly \$3.0 billion, an amount which is sufficient for a 7-month sustained import cover.

Agricultural Production

Substantial gains in palm oil and rubber production paved the way for an 8 percent growth in total agricultural production. In 1977, production was 13 percent above the long term trend, mainly reflecting the strong growth in palm oil production during the 1970's.

Rubber is the single most important crop planted in Malaysia, accounting for about half the total cultivated area and employing about 640,000 people. Rubber production in 1977 increased about 6 percent to 1.74 million tons. The expansion can be attributed to favorable prices which promote increased tapping and the maturation of rubber trees from plantings in the early 1970's. Rubber area now totals 2 million hectares, with two-thirds of it being under small-holder cultivation.

Palm oil production recorded another big gain in 1977, advancing 19 percent to 1.65 million tons. The increased production is expected to raise Malaysia's share of world palm oil production to 48 percent for 1977. An estimated 520,000 hectares of oil palm were harvested during the year, up 69,000 from the previous year. While this increase seems rather large, it is smaller than the 90,000 additional hectares harvested during 1976. New oil palm plantings in 1977 (to be harvested after 1980) totaled 53,000 hectares. The gradual slowdown in planting is attributed to decreasing availability of suitable land for oil palm and increasingly good prospects for rubber, coffee, and cocoa. About one-third of the total oil palm area has not yet come into production.

Palm oil is cost competitive vis-a-vis most other vegetable oils in the world market. The Government does not expect prices to drop significantly in the short term and plans to continue opening new lands for oil palm cultivation, although at a decreasing rate per annum.

Rice production in Malaysia (including Sabah and Sarawak) declined slightly to 1.27 million tons during 1977, mainly due to the low yield

from the off-season crop in the Muda area of Peninsular Malaysia. The planting of some 90,000 hectares had to be done 2 months behind schedule (normally done in March) after a 5-month drought ended in mid-April. A second consecutive drought in late 1977 caused the water supply to be reduced drastically in order to save the crop being harvested in early 1978.

Among other important Malaysian agricultural commodities, pineapple output rebounded from two poor harvests and totaled 242,000 tons; copra production continued at about the 120,000-ton level; and cocoa production increased by nearly a third to 20,400 tons. The increase in cocoa production was due largely to expansion in the area harvested, both as a single crop, and as an inter-crop in coconut areas.

Agricultural Trade

Rubber and palm oil tower above other agricultural exports in importance. Together, they account for 34 percent of all exports and about 90 percent of agricultural exports. Rubber is Malaysia's leading export, totaling \$1.36 billion in 1977, with value and quantity slightly higher than 1976 levels.

Palm oil exports totaled 1.47 million tons in 1977, valued at \$743 million. The volume of palm oil exports continues to rise steadily, and higher world prices increased the value by more than 50 per percent. Malaysia's market for palm oil is becoming more diversified, with larger sales to Asian countries (particularly India, and Pakistan), and the USSR. Rapidly rising exports of processed palm oil products, including refined palm oil, palm stearin, and palm oil acid have kept palm oil a major foreign exchange earner.

Food imports are estimated at \$356.3 million for 1977, a 13-percent increase over the 1976 level. The increase occurred despite a slight decline in average food import prices. Rice imports climbed to 340,000 tons, filling the production shortfall; wheat imports rose to 410,000 tons, with more than 90 percent supplied by Australia. Sugar

imports were slightly higher, at 300,000 tons.

U.S. agricultural exports to Malaysia totaled \$54.4 million, with three-fourths of the total coming from tobacco and cotton. Larger volume was responsible for the \$24.3 million tobacco sales, while price and quantity increases both contributed to the \$14.8-million cotton export value.

U.S. agricultural imports from Malaysia consist primarily of two commodities—rubber and palm oil—and accounted for 94 percent of total agricultural import value during 1977. The rubber import volume of 485,000 tons was marginally above the previous year's level, but higher prices caused import value to increase 12 percent to \$188.4 million. U.S. palm oil imports were down slightly in value to \$127 million, but volume imported dropped 27 percent to 267,000 tons during the year.

Outlook

With some slowdown in economic expansion by developed countries anticipated, Malaysia's real growth for 1978 should again be about 7 percent. The Government of Malaysia forecasts a rise in the export sector of only 7 percent in 1978 after a much stronger showing in 1977. Rubber and palm oil prices are expected to be about the same in 1978 as they were in 1977, with a slight decline possible for palm oil. Output of export commodities is generally expected to parallel that of 1977, with rubber production and exports posting modest gains and palm oil production and exports again expanding by 15 to 20 percent.

Severe drought conditions in the northwestern states of Kedah and Perlis during early 1978 have reduced rice crop prospects. Irrigation water is extremely low since most available water at the large Muda scheme was released in late 1977 to save the main-season (January-February 1978) crop. Malaysian rice production will probably fall about 30 percent to 900,000 tons during 1978. Rice imports are expected to reach 500,000 tons during 1978 to meet the shortfall in rice output with large amounts furnished by the PRC. (*E. Wayne Denney*)

MONGOLIA PEOPLE'S REPUBLIC

Agriculture in the Mongolian People's Republic (MPR) suffered losses 2 years in a row, and performance was far below planned targets (table). This was caused mainly by the severe cold winter in 1976/77 and a cold dry spring in 1977. Production of livestock, which accounts for about 60 percent of agricultural revenue, was hardest hit. Total number of young animals raised was only 7.2 million, 77 percent of the 9.3 million-head

target. In 1976, the target was also 9.3 million head, but only 7.9 million head survived the bad weather. Losses in these 2 years could reduce the total number of animals in the MPR to 21 million head in 1977 from an estimated 24.4 million head in 1975.

Total 1977 grain production, reported at 407,000 tons, was above the 340,000 tons in 1976 but about 100,000 tons below the plan target.

Table 10.--Mongolian People's Republic: Animal numbers, grain area and production, 1970-1977.

Year	: : Young : animals : raised	: : Total : animal : numbers	: : Grain : area	: : Grain : production	: : Wheat : area	: : Wheat : production	: : Hay : production
		Million head	1,000 ha.	1,000 tons	1,000 ha.	1,000 tons	1,000 tons
1970.....	7.7	<u>22.6</u>	<u>419.5</u>	<u>284.8</u>	<u>348.0</u>	<u>250.2</u>	<u>522.2</u>
1971.....	7.1	22.7	418.6	372.9	333.0	316.4	651.5
1972.....	7.8	23.1	420.3	205.0	314.0	169.7	645.7
1973.....	7.9	23.5	428.3	455.4	307.0	339.6	761.9
1974.....	8.9	24.3	429.5	315.8	306.0	250.2	794.0
1975.....	8.6	24.4	437.0	482.4	<u>3/</u> 316.0	365.7	958.0
1976.....	<u>1/</u> 7.9	<u>2/</u> 23.4	<u>3/</u> 450.0	<u>2/</u> 376.0	<u>3/</u> 324.0	<u>2/</u> 280.0	<u>2/</u> 941.2
1977.....	<u>1/</u> 7.2	<u>2/</u> 21.0	n.a.	<u>2/</u> 407.0	n.a.	n.a.	<u>1/</u> 1,000.0

1/ Survey of World Broadcasts: W961/A12, January 4, 1978; W938/A28, July 20, 1977; and W912/A14, January 19, 1977.

2/ Far Eastern Economic Review: February 18, 1977, p.44; March 25, 1977, p.72; July 15, 1977, p.49; and February 3, 1978, p.36.

3/ CEMA 1977 Yearbook

n.a. means not available

Source: National Economy of the MPR in 1975, a Compilation of Statistics, Translation on Mongolia, No. 295, JPRS 69,202, June 2, 1977, United States Joint Publication Research Service, United States Department of Commerce.

Plans for development of 89,000 hectares of virgin land, 200 percent of that plowed in 1976, appear not to have been met. The only bright note in MPR agriculture in 1977 was the production of hay, reportedly reaching an historical high of 1 million tons. Poor agricultural performance in 1977 means higher imports of grains and heavy export losses of meat, meat products, and other animal products, which account for as much as 80 percent of total farm exports.

Targets set for 1978 include 9 million head of young animals, 547,000 tons of grains, 64,000 tons of potatoes, 31,000 tons of vegetables, and

71,000 hectares of virgin land plowed. Chances of realizing these targets are far better than those in the past 2 years because weather has been mild and rainfall more plentiful.

About 90 percent of MPR's foreign trade was with the Council of Mutual Economic Assistance (CEMA) countries, particularly the USSR. Trade with the United States was again minimal in 1977. Exports to the U.S. consisted of about \$1.9 million of cashmere and goat hair and about \$200,000 worth of furskin; there were no imports from the United States. (Charles Y. Liu)

NEPAL

Agriculture accounts for 70 percent of GDP—major agricultural products are rice, corn, and wheat—major agricultural exports are rice, wheat, jute, and jute products—major agricultural imports are sugar, tobacco, and cotton.

Nepal's economy expanded at a slow pace in 1977. The GDP rose in real terms by an estimated 2 percent, the same as in 1976, due mainly to a decline in agricultural production—the result of unfavorable weather.

Total trade dropped about 2 percent in 1977 from the 1976 level of \$261 million. The export value was lower in 1977 by \$11 million from the previous year's value of \$98 million, but the import value increased \$7 million over 1976 imports of \$163 million.

Tourism was the only buoyant sector in the economy, with an estimated overseas arrival of 96,000 people, almost 20 percent more than the previous year. Tourist spending in 1977 surged by 50 percent to well over \$20 million.

Agricultural Production

Nepal's agricultural production fell more than 7 percent in 1977, largely because of dry weather in major crop growing areas. Total food grain production dropped about 9 percent, while cash crops dropped only 1 percent.

Rice, a staple food in the plains, as well as the major export commodity, accounted for about 70 percent of total grain output. Rice production fell sharply from 2.4 million tons in 1976 to 2.1 million in 1977. To boost production, the Government encouraged rice growers to increase fertilizer use by making it available in local depots at subsidized prices. Although planted area increased from 1.15 million hectares in 1976 to 1.27 million in 1977, rice production was down 12 percent due to adverse weather.

Corn, the second major crop, accounts for about 25 percent of total food grain production, and is a staple food in the hill areas. Weather was not as adverse for corn production and consequently there was only a 1 percent decline from 1976 production of 420,000 tons. The Government granted special short-term loans to corn growers in the hill areas, along with subsidized HYV seed and fertilizer.

Wheat, an important export, was also affected by dry weather, and 1977 production fell about 25,000 tons from the 1976 level of 385,000 tons. Production of other crops in 1977, in tons, was; barley, 21,000; millet, 138,000; sugarcane, 311,090; jute, 40,000; oilseeds, 61,000; tobacco, 5,000; and potatoes, 269,000.

Agricultural Trade

Nepal's foreign trade is almost entirely with its neighbors: India (about 85 percent) and Tibet, an autonomous region of China, (about 5 percent), and the remainder with the rest of the world. Being landlocked, overseas trade has grown at a slow pace.

In 1977, exports suffered a setback because of trade restrictions imposed by India. Also, while rice exports to India used to be around 250,000 tons, increased domestic consumption and lower production dropped these exports to only 100,000 tons. This was about 11 percent less than 1976 exports of \$98 million. Imports were high due to a crash import program of cement, fertilizer, and other basic commodities, and a sharp increase in prices of petroleum and fertilizer from India, the main source of Nepal's imports. Total imports increased from \$163 million in 1976 to more than \$170 million in 1977.

Nepal's major exports to India were rice, wheat, jute and jute products, ghee (butterfat), oilseeds, and timber. Imports from India were mostly construction materials, petroleum products,

metal products, cotton, textiles, and salt. Exports to Tibet were rice, salt, wool, and textile products.

U.S. agricultural exports to Nepal in 1977 were \$1.8 million; mostly nonfat dry milk, wheat, and peanut oil. U.S. imports from Nepal were \$73,000 in 1977—mostly crude bristles, goat skins, and medicinal drugs.

Outlook

Nepal's economic prospects for 1978 will depend primarily on agricultural performance.

Monsoon rains so far have not been adequate, arriving a bit late and being light in some parts of the southern plains. If rainfall patterns improve before the end of the present growing season, production might be adequate; however, there is a very real possibility for further declines in aggregate output.

Compared with 1977, Nepal expects a much greater number of tourists in 1978, possibly more than 115,000 with revenues between \$25 and \$30 million. (*Amjad H. Gill*)

NEW ZEALAND

Agriculture accounts for 15 percent of GDP—major agricultural products are milk, wool, mutton, lamb, and beef—major agricultural exports are dairy products, wool, mutton, lamb, and beef—major agricultural imports are sugar, fruits, vegetables, coffee, and tea.

Consumer spending remained sluggish and Government spending failed to take up the slack. The Reserve Bank's discount rate climbed steadily from 8.5 to 12 percent during calendar year 1977. These developments caused a shortage of funds and inclined most businesses toward short-term pessimism. Real GNP in 1977/78 (July-June) is expected to fall by 0.5 to 1 percent. The balance of payments deficit is expected to rise by more than 20 percent in 1977/78 to about \$870 million, despite some slowdown of imports which has been induced by recession.

Financing of previous debt appears to be the major factor in the increasing deficit. Gross farm income rose by 5 percent in 1976/77, but net farm income did not fare as well. Net farm income is likely to decline in 1977/78 because of production costs rising faster than unit earnings on exports, decreased overall earnings on wool exports, and decreased dairy production.

Agricultural Production

Grain production in 1977/78 is expected to be about 8 percent below 1976/77, chiefly because of declines in wheat and corn production. The decline in wheat production occurred despite a 6-percent acreage increase.

Tobacco production could increase about 4 percent over 1976/77 to 2,900 tons, but this would still be about 14 percent below 1975/76's excellent crop. Apple production rose by about 7 percent to 175,000 tons, contributing to a probable increase in total fruit production. Vegetable production may fall to a level of 220,000 tons mostly because

of an expected decline of almost 15 percent in potato output.

Production of beef and veal may drop by 4 to 5 percent, to 525,000 tons for the second consecutive year of declining output. The decrease may not occur if the current dryness turns into full-fledged drought and farmers increase slaughter by cutting back herd numbers. Production of sheepmeat is likely to increase about 5 percent, mostly in lamb production because of higher average slaughter weights in all types of sheep slaughtered during the first half of the year.

Dry conditions are expected to reduce milk production in 1977/78. Production of butterfat was down almost 7 percent in the first 5 months of 1977/78, compared with a year earlier. With increased numbers of sheep, wool production is likely to rise about 4 percent in 1977/78, to about 315,000 tons.

Agricultural Trade

In the first quarter of 1977/78 (July-September), compared to that of 1976/77, total imports rose by 9 percent to \$890 million, while exports rose by 11 percent to \$730 million. Agricultural imports were up during this period by almost 12 percent to about \$55 million, and exports rose 14 percent to \$480 million. Among farm exports, the volume of dairy products (exclusive of casein) was up in the first quarter by about 15 percent to 46,000 tons while earnings on exports rose by more than 30 percent to \$79 million. Exports of meat and meat preparations rose in volume by only 4 percent to about 180,000 tons during the first quarter, but value increased by 11 percent to \$184 million. Wool earnings, however, were down about 6 percent to \$118 million and volume by about 17 percent to almost 48,000 tons.

Thus, meat exports which paced a large increase in New Zealand's agricultural exports during 1976/77, continued to do so into the

1977/78 year (table). In turn, this promises some decrease in the trade deficit, but that improvement will be largely offset in the balance of payments by growing outlays for payments on past debts.

Outlook

Most forecasts on New Zealand's economic growth predict a continuation of the slightly downward trend in real GNP into 1978/79, with output beginning to pickup perhaps by early 1979. The recession is likely to dampen the rate of inflation, as measured by the CPI to about 14 to 15 percent during 1978/79, compared with recent levels of 16 percent. Lower inflation may

be partly attributable to smaller increases in import prices.

The balance of trade in 1978/79 is forecast to register a small surplus but, again, the effect on the balance of payments will be nullified by growing payments on overseas debts. Meat and dairy exports are expected to continue to rise in value in 1978/79, although the current dry weather may slow the rate of increase in dairy exports by late 1978. Due to a reduced 1977/78 wheat crop, New Zealand may reappear as a small net importer of wheat during 1978/79. Assuming a setback in world economic resurgence and hesitancy on the part of overseas textile firms, the value of wool exports is forecast to fall again in 1978/79. (*Miles J. Lambert*)

PAKISTAN

Agriculture accounts for 38 percent of GDP—major agricultural products are wheat, rice, cotton, and sugarcane—major agricultural exports are cotton and rice—major agricultural imports are wheat, vegetable oil, and tallow.

Political unrest from March through June of 1977, greatly hampered Pakistan's economic activities for that year. GDP in real terms was estimated to have increased only 0.5 percent in 1977 compared with the previous year's 3.8 percent and the five-year plan target of 8.1 percent. The stagnation in growth occurred despite the 7 percent increase in agriculture. This compares to the previous year's growth of 4.5 percent and the plan target of 8 percent. While agricultural production increased, there was a net fall in industrial production of about 0.8 percent in 1977. Gross fixed investment increased by 20 percent to a level of \$2.7 billion—9 percent lower than last year's increase—and domestic savings increased about 15 percent to \$1.4 billion, lagging far behind the 1976 growth rate.

Fortunately, the high rate of inflation experienced in 1974 and 1975 declined for the second year in a row. The 1977 wholesale price index increased an average of 11.0 percent, compared with 11.4 percent the previous year, and 26.1 percent in 1975. The increase in the 1977 consumer price index was 9.2 percent, compared with 11.7 in 1976 and 16.7 in 1975.

Total value of exports declined from \$889 million in the first 9 months of 1976 to \$883 million in the same months of 1977. Total imports rose 16 percent to \$1,800 million between January-September 1977.

Agricultural Production

Total agricultural production increased about 7 percent in 1977, slightly more than 1976 growth. The index of total agricultural production increased, primarily because of the sharp recovery in cotton production. Total food crop production rose slightly from 13.7 million tons in 1976 to about 14.2 million tons in 1977.

Production of wheat, the major staple food, increased about 500,000 tons in 1977 over the previous year's record crop of 8.4 million tons. The rise in wheat output is attributed to abundant rainfall in late 1976 and early 1977, sufficient irrigation water early in the season, and government encouragement to use more subsidized fertilizer. Area planted to wheat in 1977 increased to 6.3 million hectares, compared with 6.1 million in 1976 because of an aggressive campaign to shift land from low-yielding cotton to wheat. Of total wheat area in 1977, about 4.3 million hectares or 68 percent was planted to HYV. Wheat production would have reached a record 9 million tons in 1977, had some wheat growing areas in the Punjab not been hit by a hot dry spell in February-March 1977, followed by too much rain in April.

Rice production, the second major export commodity, is estimated at 2.8 million tons, up slightly from the 1976 production of 2.7 million. Rice production has been increasing each year due to considerable Government stress on supplying certified seed, sowing and transplanting at the proper time, and providing and encouraging optimum use of fertilizer and pesticides. To increase 1977 basmati rice production, the Government distributed about 1,500 tons of seed at subsidized prices

to small farmers. The Government also distributed zinc sulphate in deficient areas. Pakistani farmers traditionally plant rice by broadcasting the seed, so the yield is not as high as in those countries using the transplant method. To increase rice yields in 1977, Pakistan imported 20 rice transplanters prior to planting for use in Punjab and Sind where most Pakistani rice is grown.

Cotton is a major source of Pakistan's foreign exchange earnings and the mainstay of the domestic textile industry. The Government campaigned very hard to increase cotton production by providing financial incentives and subsidized inputs. In 1977, cotton production is estimated to have increased about 27 percent to 530,000 tons from the low production of 418,000 tons in 1976. Cotton area was down 5 percent from the previous year's 1.87 million hectares. Good weather, more fertilizer use, free Government spraying of most cotton land, and Government distribution of high quality cotton seed, resulted in yields of 300 kilograms per hectare in 1977, compared with 225 in 1976 and 265 in 1975.

Corn production rose from 764,000 tons in 1976 to 782,000 tons in 1977. Barley output declined 5 percent to 124,000 tons in 1977, while chickpea (gram) production rose 8 percent to 649,000 tons. Production of other pulses rose from 685,300 tons in 1976 to about 753,000 tons in 1977.

Agricultural Trade

Pakistan's total export earnings declined from \$890 million in the first 9 months of 1976 to \$883 million for the first 9 months of the previous year. Agricultural export earnings decreased from \$300 million between January-September of 1976 to \$270 million in the same 1977 period.

Due to riots and harbor strikes, Pakistan's rice export earnings fell sharply to \$193 million during the first 9 months of 1977, down 19 million from a year earlier. Total rice exports during January-September were about 588,000 tons, compared to 706,000 tons exported during January-September of 1976. Major buyers of Pakistani rice in the first 9 months of 1977 were Sri Lanka, 122,800 tons; Iran, 72,800 tons; Indonesia, 50,000 tons; Saudi Arabia, 35,500 tons; and Turkey 35,200 tons.

Raw cotton exports declined from \$45 million in January-September 1976 to about \$26 million in the same period of 1977. Major causes for decline in cotton exports were the unstable domestic political situation and a sharp decline in cotton production.

Other major Pakistani exports during the first 9 months of 1977 were fruits and vegetables, \$26

million; fish and fish products, \$22 million; guar and guar products, \$12 million; raw wool, \$6 million; and unmanufactured tobacco, \$4 million.

Pakistan's total imports during January-September of 1977 jumped to \$1.8 billion, compared with \$1.6 billion during the same period of 1976. Major imports were petroleum and petroleum products, fertilizer, edible oil, and tea.

U.S. agricultural exports to Pakistan fell sharply from \$144 million in 1976 to \$85 million, or a decline of 59 percent in 1977. The steep fall in U.S. exports to Pakistan was the country's decision not to import wheat in 1977, but to use its old wheat stocks and reduce storage problems. Major U.S. exports to Pakistan in 1977 were tallow and soybean oil. U.S. agricultural imports from Pakistan dropped from \$2.1 million in 1976 to \$1.8 million in 1977. Main imports were molasses at \$1.03 million and kid hair valued at \$414,000. Lamb skins, cotton waste, wool, and mixed spices were also imported from Pakistan during 1977.

Outlook

Pakistan's depressed economic condition may improve in 1978. The new Government introduced a series of measures at the end of 1977 to improve the economic situation, particularly agriculture and industry. Measures are immediate injections of agricultural imports and accelerated improvements in plant protection, particularly for cotton which has been plagued by pests in recent years. Wheat and sugar production will probably increase in 1978 if monsoon rains are adequate and overall good weather prevails.

To boost textile output, the Government introduced a price subsidy for the textile industry, whereby the price paid ginners for cotton was lowered from \$41.90 to \$32.80 per maund (82.27 pounds) with the difference being paid by the Government. This subsidy was to enable textile mills to be more competitive in international markets and boost foreign exchange earnings. The Government hopes that increased demand for raw cotton by the textile industry will provide an additional incentive for farmers to grow more cotton.

Increased use of fertilizer, expansion of area planted to HYV, and increased procurement prices are expected to contribute to higher food grain production. Area under HYV wheat is expected to increase from 4.27 million hectares in 1977 to 4.30 million hectares in 1978. Pakistan expects a bumper wheat crop of about 9 million to 9.5 million tons in 1978 because of good weather, sufficient rainfall, and adequate irrigation water.

However, Pakistan may still import 950,000 to 1.5 million tons of wheat to replenish stocks used in 1977. A major share of imported meat will come from the United States under P.L.-480, CCC

loans, and some cash purchases. The United States may supply the major part of 1978 edible oil imports, estimated at 320,000 tons. (*Amjad H. Gill*)

PAPUA NEW GUINEA

Agriculture accounts for 35 to 40 percent of GNP—major agricultural products are copra, coffee, and cocoa—major agricultural exports are copra, coffee, and cocoa—major agricultural imports are rice and sugar.

Papua New Guinea (PNG) has been an independent nation since September 1975. A former Australian territory, the country depends heavily on grants from Australia. Most key government positions are now held by native Papua New Guineans, although Australian influence is still predominant in all sectors.

High prices for coffee and cocoa during 1977 triggered a 6-percent exchange rate appreciation of the PNG Kina against the dollar. Foreign exchange reserves stood at \$431 million near year's end. The CPI rose by about 5 percent during the year.

Agricultural Production

About three-fourths of all PNG's households depend primarily on subsistence farming. Principal crops grown include taro, cassava, rice, and sago. Production estimates for these crops were not available.

In response to higher world prices, coffee production reached about 43,000 tons in 1977 (based on October-September year), about 8 percent higher than the previous crop. Cocoa output continued at about 28,000 tons. Coffee is primarily a smallholder crop, while cocoa is grown mainly on plantations.

Papua New Guinea is the largest producer of copra in the South Pacific. Most copra is produced in the eastern provinces and about half is produced by smallholders. Production declined to about 150,000 tons in 1977 because of aging trees and poor management, but massive rehabilitation efforts now underway should allow copra production to expand considerably by the late 1980's.

Palm oil, first produced in the country in 1967,

is the most rapidly expanding agricultural product in PNG and currently totals about 27,000 tons. It is grown in an area where a nucleus estate has been established to assist smallholders on surrounding farms. Plans call for 100,000 tons to be produced by the mid-1980's on an area of 30,000 hectares.

Agricultural Trade

The products just discussed also represent principal agricultural exports for PNG. Export trends for the past 3 years closely parallel production patterns.

Agricultural imports consist mainly of sugar and rice, almost exclusively from Australia, the traditional supplier. The close ties established with Australia will make the PNG market extremely difficult for other countries to penetrate in the near future. Presently, there is little or no trade with the United States.

Outlook

Production of coffee and cocoa will be down in 1978 because of the prolonged rainy season. Poor agricultural practices and lack of replanting by smallholder coffee growers will contribute to the decline.

The recently announced plan by the Government to transfer expatriate-held plantation holdings to smallholders has hampered progress in most agricultural commodities. Plantation owners are no longer willing to make long term investments in holdings which they may soon lose.

Opportunities for foreign investment in agriculture are good. Two additional nucleus oil palm estates are being planned, and the Government is also interested in investing in rice and sugar production and processing. Feasibility studies have been made and specific areas identified for growing both crops. (*E. Wayne Denney*)

PHILIPPINES

Agriculture accounts for 34 percent of GDP—major agricultural products are rice, livestock, copra, sugarcane, and corn—major agricultural exports are sugar, coconut products, bananas, and pineapple—major agricultural imports are wheat, cotton, and corn.

Philippine economic performance slowed somewhat in 1977. Real GNP was up only 6.1 percent, compared with 6.7 percent the previous year. Inflation was estimated at 7.9 percent.

The strongest sector during 1977 was mining and quarrying—up 11 percent in real terms. Gains in other sectors were manufacturing, 8 percent; services, 7 percent; communications, 6 percent; construction, 6 percent; agriculture, 5 percent; commerce, 4 percent; and forestry, 4 percent.

Preliminary estimates by the Philippine Government place the 1977 trade deficit at \$813 million, 23 percent smaller than the 1976 deficit. Export receipts are estimated at \$3.07 billion and import payments at \$3.88 billion. Higher export values and in some cases increased volume, with only modest increases in imports, were responsible for the smaller trade deficit. Export earnings for the 10 principal commodities increased an average of 10 percent, although earnings for copper concentrates, logs, and bananas dropped. For the 10 principal imports, only nonelectrical machinery and cereals and cereal preparations declined.

A doubling of the nonmerchandise trade surplus to \$230 million, an increase in net transfers of \$220 million, and a \$140 million foreign transactions surplus, combined to reduce the current account deficit to \$210 million. Foreign exchange reserves stood at \$1.53 billion at the end of 1977.

Agricultural Production

Agricultural production in 1977 was about 2 percent above the 1976 level and 7 percent above the 1950-1977 trend. Performances of the major commodities varied widely. Grain and banana production continued to show sharp increases, while sugar output fell considerably and coconut production was down slightly. Weather was generally favorable for the third consecutive year.

Rice production surged upward again in 1977, reaching 4.3 million tons. This record output was nearly 10 percent above the 1976 level and about 12 percent above trend. Excellent weather during the growing and harvesting season for the main crop more than offset the small losses caused by typhoons in central Luzon. It is estimated that July 1, 1978 rice stocks will exceed the million-ton

buffer level by nearly 300,000 tons. This will help the country maintain stabilized rice prices during 1978 and permit some rice exports (mainly to Indonesia).

Several factors explain the rather rapid transition from a major rice importing country to one with a rice surplus: 1) improved varieties developed by the International Rice Research Institute; 2) favorable weather; 3) the Masagana 99 program which stressed use of proper inputs directed by extension workers; and 4) improved irrigation infrastructure. The Philippine Corporate Farming program, which requires large corporations to produce rice for their employees also added to increased rice production.

Corn production reached 3 million tons in 1977, an increase of nearly 8 percent over the large 1976 crop and 15 percent above the long-term trend. Corn output is about 50 percent more than it was in the early 1970's. While the country continues to have difficulty with corn insects and diseases, more attention is being given to corn since the rice supply-demand balance has become favorable. Feed grains can now be produced to comply with the corporate production program.

Reduced area and lower yields caused the 1977 (September 1976-August 1977) sugar crop to decline about 7 percent to 2.7 million tons. However, sugar exports achieved record levels in 1977, as the Philippines reduced stocks to a minimum in anticipation of the International Sugar Agreement, which went into effect on January 1, 1978. Under the agreement, the Philippines has a basic quota of 1.4 million tons, but this will be reduced to 1.2 million for 1978 as the price on the world market has been below the minimum specified in the agreement.

Studies are underway to determine the current area and production level of each sugar planter, and planters will probably be given either an area or production quota in the near future. Such a system is necessary to maintain a reasonable supply-demand balance in the country.

Below normal rainfall in late 1976 in the southern Philippines reduced 1977 copra production by 6 percent to 2.4 million tons, but still 11 percent above trend. A program to replace old trees with new hybrid varieties is progressing according to schedule, but some of the newer varieties are susceptible to dry bud rot and blast. Relatively good prices during 1977 encouraged both replanting of coconut areas and expansion of new ones.

The commercial banana industry surmounted several adversities to increase its outturn by 5 percent to 1.2 million tons in 1977. A short

drought and wind damage in the concentrated growing area of southern Mindanao, coupled with soil deficiencies in some areas, hampered production increases. However, increased area and expanded fertilizer use made the larger harvest possible.

Among other major crops, tobacco output again totaled 84,000 tons as dry weather not only prevented increased output but resulted in poorer quality tobacco. Pineapple production continued its climb and reached 450,000 tons as the two large Philippine pineapple plantations increased area by about 10 percent.

The Philippines is nearly self-sufficient in pork production, but beef output is inadequate to meet current demands, particularly for high quality beef. During 1977, pork production rose to 275,000 tons, whereas beef advanced to 138,000 tons.

Agricultural Trade

Agricultural exports reached \$1.71 billion in 1977, accounting for 55 percent of total exports and representing a 34 percent increase from the 1976 level. Japan and the United States are the largest markets, but trade has increased with the USSR and PRC in recent years. During 1977, coconut oil replaced sugar as the leading export commodity, as sugar prices fell while coconut product prices rose during the year. Leading agricultural exports were coconut oil, \$371 million; sugar, \$360 million; copra, \$182 million; bananas, \$107 million; desiccated coconut, \$72 million; and pineapples, \$45 million.

Agricultural imports totaled \$368 million in 1977, marginally above the 1976 level. Since the country has practically stopped importing rice, wheat is by far the leading agricultural import, followed by cotton, nonfat dry milk, tobacco, and soybean meal.

U.S. agricultural exports to the Philippines climbed to \$186 million in 1977. Tobacco exports advanced 22 percent to \$32.2 million, while cotton exports reached \$26.6 million. U.S. corn exports increased fivefold to \$13.4 million, primarily because of renewed efforts to expand the Philippine livestock industry. Wheat continued to be the leading export in 1977, at \$44.8 million, but the sharp price drop during the year caused value to decline by nearly 40 percent.

U.S. agricultural imports from the Philippines rose 20 percent to \$599 million in 1977, as sugar and coconut oil accounted for 81 percent of the total. U.S. coconut oil imports showed a sixfold increase to \$235 million, as volume imported more than tripled. The quantity of sugar imported climbed 40 percent to 1.18 million tons, but value rose only slightly to \$248 million. Pineapple (\$46 million) and desiccated coconut (\$31 million) were other major agricultural imports that rose in value during the year.

Outlook

With some improvement expected in the economic well being of the Philippines' major trading partners, its 1978 trade deficit should decline. Receipts from sugar will be lower in 1978, because of vastly reduced volume permitted under the new International Sugar Agreement. Export receipts from coconut products should be slightly above the 1977 level as world prices remain strong and volume increases. Exports of nontraditional products will continue upward. A tight policy will be followed in the allocation of foreign exchange to finance imports. Nevertheless, the oil bill will rise considerably.

Agricultural production should show a stronger uptrend in 1978 than in 1977. The key will again be rice production, which has suffered no serious setbacks for the past 3 years. Barring serious weather or disease adversities, rice production should reach 4.5 to 4.6 million tons in 1978. Prospects for increased rice exports are good at this time, but if the Philippines finds itself in a continuing rice surplus situation, more resources will be shifted to corn. The rapidly expanding beef and swine enterprises will require a strong upturn in corn production in order to keep corn imports from rising above 150,000 tons.

The expected decline in sugar output (in anticipation of reduced export quotas) should be more than offset by production increases in other commodities. Copra production should rise about 8 percent to 2.6 million tons. Tobacco production should rebound, while only severe adversities will permit pineapple and banana output from showing strong gains. (*E. Wayne Denney*)

SINGAPORE

Agriculture accounts for 3 percent of GDP—major agricultural exports are rubber, vegetable oil, and spices—major agricultural imports are rubber, vegetable oil, cotton, and spices.

Singapore's successful development efforts continue to be unparalleled in the Asian region. In the 12 years since independence, it has grown to the world's fourth busiest port, third largest refining center, and Southeast Asia's premier communications and banking center.

Real GNP increased by about 8 percent in 1977. The manufacturing and electronics industries remained strong, while the shipbuilding industry continued to be weak. In the past, the ships built for Japan were large tonnage vessels, but have become smaller in recent years. The petroleum refining industry has continued to expand despite lingering problems of overcapacity and soft demands.

To add to its economic and political security, the Singapore Government has been very active in the development of the Association of Southeast Asian Nations (ASEAN), (Singapore, Malaysia, Thailand, the Philippines, and Indonesia). This regional economic group could partially compensate for Singapore's lack of a hinterland by allowing product access to broader markets. Although the first steps toward trade liberalization within ASEAN have been taken, it appears that economic unity will take a considerable amount of time. Singapore perhaps tends to gain most from intra-ASEAN trade preferences, and is therefore in the forefront of efforts to broaden them.

Singapore's total trade—an important indicator of the country's economic activity—increased 20 percent in 1977 to more than \$19 billion. Exports rose faster than imports, thereby permitting the trade deficit to narrow to \$2.2 billion.

Agricultural Trade

Since Malaysia now directly exports most of its palm oil rather than exporting it through Singapore, transhipped rubber ranks second to petroleum as Singapore's leading export and is now the dominant agricultural product traded in Singapore. Based on 9 months data, crude rubber exports during 1977 were projected at \$1.0 billion, a 24-percent rise from the 1976 level, but slightly less than half the 1975 growth.

Singapore is a well-diversified market for U.S. agricultural products. Soybeans, fresh fruit, meat products, and cotton were the leading items shipped during 1977. Total U.S. agricultural exports to Singapore rose 29 percent to \$72.5 million in 1977. Rubber dominates U.S. agricultural imports from Singapore, accounting for nearly three-fourths of the \$32.1 million received.

Outlook

Singapore's prospects for continued strong economic growth are especially bright since the country's performance was gaining momentum at the end of 1977 and the beginning of 1978. Inflation should be minimal and a 6 to 8 percent real growth is expected. While Singapore still depends heavily on entrepot trade, industrialization is proceeding rapidly.

The country's stable political situation, strategic location as a crossroads of Asian commerce, skilled labor supply, and Government encouragement should continue to attract foreign investment.

Prospects for increased U.S. agricultural exports to Singapore are good but competition from neighboring Asian suppliers remains stiff. U.S. soybeans should enter in increasing amounts during the next few years. (*E. Wayne Denney*)

SRI LANKA

Agriculture accounts for 32 percent of GDP—major agricultural products are tea and rice—major agricultural exports are tea, rubber, and coconut products—major agricultural imports are rice and wheat flour.

Despite major economic setbacks carried over from 1976, Sri Lanka's economy managed to move ahead during 1977. Civil disturbances following the elections and clashes between Sin-

halese and Tamil communities in August, 1977 may have had some negative impact on economic growth. Real GDP increased 4 percent, compared with 3 percent in the previous year and 2.8 percent a year in the first half of the 1970's. Increased domestic food production and higher export prices helped offset rising prices for imported food, consumer goods, and petroleum products. Inflation, difficult to quantify in Sri Lanka, was officially estimated to be in the range of 10 to 20 percent in 1977.

Sri Lanka's exports showed a healthy increase—\$460 million, up 43 percent from the previous year. Tea was the leading export—contributing 58 percent of total export earnings. Value of total imports in 1977 was about \$976 million, up \$358 million from 1976.

Agricultural Production

In late 1976 and early 1977, sufficient rainfall and good weather resulted in increased food production. Total agricultural production in 1977 increased 13 percent from the low production level of 1976, and 11 percent above the 1974-76 average. Over the longrun, Sri Lanka's total agricultural production has been increasing at a compound annual rate of 2.5 percent. Total food grain production rose from 957,000 tons in 1976 to almost 1.4 million tons in 1977. Rice—the major grain—rose sharply from 852,000 tons in 1976 to 1.3 million tons in 1977, an increase of 48 percent from the previous year and about 39 percent above the 1974-76 average. The excellent production in 1977 was mainly due to good rains and adequate fertilizer distribution. In addition, the Government offered substantial incentives to rice farmers by raising the procurement price of paddy from Rs 33 to Rs 40 (\$1=Rs 7.70) per bushel (46 pounds). Also, inputs were made available to rice growers at subsidized prices. Rice area expanded under the Mahaweli irrigation project.

Tree crop production, adversely affected by drought during the past 2 years, showed some recovery in 1977. Production of tea, the major export commodity, rose from 200,000 tons in 1976 to 210,000 tons in 1977. Improved weather and higher world tea prices were the major causes of the slight increase. Also, as a result of revaluation of the rupee in March 1977, from Rs 8.50 to Rs 7.70 per dollar and adjustments in the ad valorem tea tax in March 1977, producer price margins increased substantially.

Production of rubber, the second major export commodity, moved up more than 5 percent in 1977 over 1976 production of 152,000 tons, and about 11 percent higher than the 1974-76 average. Higher world prices provided the major incentive for rubber growers to use better techniques in rubber tapping and drying to increase production.

Coconut production rose 6 percent from 165,000 tons in 1976 to 175,000 tons in 1977. Coconuts are mostly grown by small landholders with the major portion used within the country.

Agricultural Trade

Booming world prices for tea and rubber increased Sri Lanka's total exports to a record high of about \$800 million in 1977, compared

with the 1976 export value of \$560 million, 60 percent higher than the 1973-75 average. Skyrocketing world coffee prices also boosted tea prices. Sri Lanka's tea price rose from 58 cents a pound in late 1976 to an average of \$1 a pound in 1977. Tea accounted for foreign exchange earnings of about \$460 million in 1977, up from the previous year's earnings of \$249 million.

Rubber exports rose from 138,000 tons in 1976 to 150,000 in 1977, as higher world market prices increased earnings from these exports from \$106 million in 1976 to an estimated \$131 million in 1977. The major buyer for the last 20 years under a rice for rubber barter agreement was the People's Republic of China. Coconut exports, traditionally the country's third major export earner, have declined in recent years—\$44 million in 1976 to \$22 million in 1977—due to increased domestic consumption. Other exports such as gems, shellfish, spices, and ceramics showed the biggest percentage gains, rising from \$137 million in 1976 to about \$160 million in 1977.

Sri Lanka's imports are mostly wheat flour, rice, and fertilizer. Total 1977 imports were about \$976 million, more than 58 percent over 1976 imports of \$618 million. Import values rose in 1977 because Sri Lanka imported record quantities of wheat flour and rice and had to pay higher prices for petroleum and petroleum products. In 1977, the country imported more than 531,000 tons of wheat flour compared with the previous year's import of 450,000 tons. More than half came from the United States under P.L.-480 and CCC loans and the rest was supplied by Canada, Singapore, France, and Australia.

Singapore signed an agreement in late 1977 to build a \$30 million flour mill in Sri Lanka. When complete, Sri Lanka will import wheat for milling. Singapore will operate the mill free of charge and will recover its costs by receiving the bran from the milling process. After 20 years, Singapore will turn the mill over to Sri Lanka as a gesture of good will.

In 1977, Sri Lanka imported about 543,000 tons of rice, compared with 1976 imports of 440,000 tons. Main suppliers were PRC, Pakistan, Burma and Thailand.

U.S. agricultural exports to Sri Lanka rose from \$26.5 million in 1976 to \$42.5 million in 1977, due mainly to increased wheat flour exports—\$33 million in 1977, compared with 1976 value of \$21 million. Other major exports were cotton and vegetable oils.

U.S. agricultural imports from Sri Lanka rose sharply to \$51 million, up more than \$17 million from 1976. Tea, worth \$39 million, was the major commodity imported by the United States in 1977; natural rubber valued at \$4 million was the

second. Other imports were coconut oil, cinnamon chips and coir.

Outlook

Prospects for 1978 are more encouraging than they have been for many years. The Government forecasts that Sri Lanka's economy may grow at a rate of 5 to 6 percent, compared with 4 percent in 1977.

Agricultural production, particularly paddy, is expected to rise appreciably and prospects for tea and rubber appear favorable. Rains in the fall of 1977 improved the outlook for the Maha rice crop (the major crop harvested in February-April). Government estimates for 1978 Maha rice are

between 850,000 to 900,000 tons compared with 750,000 tons in 1977.

Sri Lanka's foreign trade outlook is fairly optimistic because of rising world prices for tea and rubber. Increasing world demand for gems, spices, and ceramics will also raise export earnings.

Imports in 1978 may increase faster than expected. The Government is building new industries such as a textile and fertilizer plant which will raise import requirements. The country will have to import 300,000 to 350,000 tons of rice and 550,000 to 600,000 tons of wheat flour in 1978. Flour imports will be primarily from the United States as P.L. 480 and CCC loans and under food aid from Australia and Canada. (*Amjad H. Gill*)

TAIWAN

Agriculture accounts for 16 percent of GNP—major agricultural products are rice, sweetpotatoes, vegetables, and meat—major agricultural exports are sugar, mushrooms, fruits, and vegetables—major agricultural imports are corn, wheat, soybeans, and cotton.

Taiwan's economy, booming for the last 2 years, slowed in 1977. The GNP grew in real terms at an annual rate of 8.1 percent—down 11.6 percent from the previous year. Two major typhoons in July 1977 had very destructive effects on the economy. Per capita income in 1977 rose to about \$1,100, a real growth of 6 percent over last year. The industrial production index grew by 11.2 percent in 1977, compared with 14.9 percent in 1976. The rapid rise of industrial output in 1976, however, followed 2 recession years when industrial production grew by an average of only 2.1 percent. Textiles, the major manufacturing industry, beset by rising costs, stiff competition, sluggish demand, and restrictive quotas in major export markets, rose only 4 percent over the previous year.

Wholesale prices moved up 4.2 percent, compared with the previous year's rise of only 2.8 percent. Consumer prices rose 6.3 percent in 1977, while wages increased by an average of 15.5 percent.

Taiwan's total exports and imports for 1977 reached alltime highs of \$9.3 billion and \$8.5 billion, for a record trade surplus of \$834 million. The trade surplus with the United States was about \$1.7 billion, while the deficit with Japan totaled \$1.5 billion.

Agricultural Production

Total agricultural production rose a moderate 1.2 percent over 1976 and 8.2 percent over the

1974-76 average. Over the longrun, agricultural production grew at a compound annual rate of 3.8 percent. Total 1977 production was affected by flood and drought during spring and early summer.

After five consecutive bumper crops, rice production declined slightly to 2.4 million tons in 1977. Despite this slight decline from the previous year's 2.5 million tons, production still exceeded the 1974/75 average by 5.7 percent. In past years, the Government offered incentives to grow rice. This encouragement increased production, caused storage problems, and forced the Government to limit the amount of rice eligible for price support. As a result, rice area dropped from 786,000 hectares in 1976 to 779,000 in 1977.

Sweet potato output in Taiwan has dropped steadily since the early seventies and declined from 1.8 million tons in 1976 to 1.7 million in 1977. Farmers are less interested in this crop because of its low cash value and high labor costs. The bulk of sweet potatoes is used for feeding hogs and livestock. Farmers, however are now buying more imported, cheaper, feed grains to replace sweet potatoes.

Despite typhoon and flood losses during the summer of 1977, sugarcane output still managed an impressive rise of 11.1 million tons, 27 percent over last year's 8.7 million tons. Total area planted increased from 109,000 hectares in 1976 to 119,000 hectares in 1977. Since sugar is a major export commodity, the Government stressed increased production through a guaranteed minimum price paid to sugarcane farmers.

Corn production jumped 24.5 percent to 142,000 tons in 1977, compared with the previous year's production of 114,000 tons. Although area planted to corn dropped from 41,000 hectares in 1976, to 36,000 hectares in 1977, yield per hectare rose dramatically from 1,800 kilograms to 3,900 kilo-

grams. The increase in yields more than offset the decrease in area. The Government encouraged farmers to increase yields by subsidizing fertilizer and increasing the guaranteed corn price from \$145 per ton in 1976 to \$158 per ton in 1977. Output of cassava, used mostly for livestock feed, declined from 294,000 tons in 1976 to 275,000 tons in 1977.

Typhoons damaged many citrus orchards in 1977, consequently production dropped from 384,000 tons in 1976 to 357,000 tons in 1977. Banana production also suffered and dropped from 126,000 tons in 1976 to about 105,000 tons in 1977. Pineapple areas were unaffected and output rose 4.2 percent over 1976 production of 289,000 tons.

Vegetable production which includes mushrooms, asparagus, tomatoes, potatoes, and other vegetables, jumped 4 percent in 1977 to 2.6 million tons. Vegetable area increased from 192,000 hectares in 1976 to 198,000 hectares in 1977 and occupied the second largest amount of land after rice. Excluding bananas and citrus, fruit production dropped 12 percent to 440,000 tons because of bad weather.

Taiwan's total meat production increased from 674,000 tons in 1976 to almost 703,000 tons in 1977. More than 81 percent was pork, which increased 10 percent to 571,000 tons. Poultry production rose from 98,000 tons in 1976 to 106,000 tons in 1977; 80 percent was chicken. Milk production showed a slight increase of 3,000 tons in 1977 over 1976 production of 45,000 tons.

Agricultural Trade

Taiwan had a booming trade year in 1977. Total exports reached an alltime high of \$9.3 billion, an increase of \$1.2 billion or about 15 percent over 1976 exports of \$8.1 billion. Exports of major agricultural commodities during the first 10 months of 1977 were \$397 million, down about 3 percent from the same period for 1976. Major agricultural export commodities were pork, sugar, mushrooms, bananas, asparagus, canned citrus and vegetables, and fresh and canned pineapple. Sugar, the leading export, dropped sharply from \$146 million in January-October of 1976 to \$114 million in the same period of 1977 because of a slump in the world sugar market. The United States, Japan, South Korea, Indonesia, Saudi Arabia, and Malaysia were major buyers of Taiwan's sugar. Mushrooms, replacing asparagus as the second largest export commodity, brought earnings of almost \$100 million in the first 10 months of 1977, up \$44 million over that of 1976. Major buyers were Japan, Singapore, Hong Kong, Indonesia, the United States, Canada, and West Germany. In the first 10 months of 1977, aspar-

agus exports declined sharply to \$58.3 million, compared to \$73.2 million in the same 1976 period. For the last few years, earnings have slipped due to stiff competition from South Korea.

Frozen pork exports declined significantly from \$65.2 million during January-October 1976 to almost \$45 million for those months in 1977. Japan levied a high import duty on pork to protect its own domestic producers. Japan is Taiwan's major market for pork, followed by Hong Kong, Singapore, and the Philippines.

Taiwan's total imports rose more slowly than its exports. Total imports increased from \$7.6 billion in 1976 to almost \$8.5 billion in 1977. Imports of major agricultural commodities leaped from \$740 million in the first 10 months of 1976 to \$832 million in the same 1977 period. Taiwan's cotton imports in January-October 1977 were valued at \$293.3 million, up 44 percent from those months of 1976. During 1977, Taiwan imported less cotton but paid higher prices. Cotton imports during the first 10 months of 1977 were 153,000 tons, compared with 169,000 tons for January-October 1976.

Taiwan's livestock industry is dependent on imported feed grains. As a result, corn imports rose from 1.5 million tons (\$201 million) in the first 10 months of 1976 to 1.6 million tons (\$193 million) for this period in 1977.

Soybean import value climbed sharply from \$140 million in January-October 1976 to \$170 million in January-October 1977, while tonnage decreased from 637,000 to 545,000 tons for these periods. Wheat imports declined from 505,000 tons (\$88 million) to 454,000 tons (\$60 million) for the January-October months of 1976 and 1977. Because of storage problems, the country was unable to import all the wheat for which it had made contracts. Other commodities imported by Taiwan in January-October 1977 were sorghum, \$43.4 million; tobacco, \$38.5 million; barley, \$26.1 million; and tallow, \$11.4 million.

The United States was the major supplier of Taiwan's agricultural imports. U.S. agricultural exports were \$474 million in 1976 and increased to almost \$611 million in 1977. Cotton exports in 1977 exceeded the 1976 value by \$49 million, corn by \$47 million, and tobacco by \$18 million. Most of these increases came from higher prices.

In 1977, U.S. imports from Taiwan increased \$32.3 million over 1976's \$108.7 million. This increase came mainly from higher prices for canned mushrooms and vegetables, tomato paste, and canned water chestnuts. Mushroom import value was \$18 million higher than the previous year's \$36 million. Canned vegetable imports reached \$26 million, \$10 million over 1976; canned mandarin oranges value increased by \$4 million. Other major agricultural imports from Taiwan

were canned pineapple, mixed spices, sugar, and citronella oil.

Outlook

Taiwan's 1978 economy is expected to equal or better 1977's performance. The Government has forecast that 1978 economic growth may increase between 8.5 and 9.0 percent, compared with 1977's 8.1 percent. To attract more foreign investment in 1978, the Government announced a ten-point guideline which will reduce taxes and increase from 15 to 20 percent the amount of earnings which may be worked back into the economy annually.

Taiwan is projecting agricultural production to increase about 2 percent in 1978. Crop production is expected to increase only about 0.9 percent in

1978 because of a reduction in rice production—from 2.45 million tons in 1977 to 2.26 million tons in 1978. Sugar and banana production will be down in 1978, the aftermath of earlier typhoon damage. Production of canned mushrooms will remain about the same as in 1977 while canned asparagus should decrease considerably for lack of export markets and accumulation of excess stocks.

Taiwan expects to import about 750,000 to 800,000 tons of soybeans in 1978. Corn imports are forecast at 2.5 to 2.8 million tons, with the U.S. share expected at more than half. Cotton imports are projected at about 190,000 to 200,000 tons with the U.S. share as much as 60 to 65 percent if U.S. prices are competitive. Taiwan is encouraging purchases from the United States to reduce its large trade surplus. (*Amjad H. Gill*)

THAILAND

Agriculture accounts for slightly more than 28 percent of GNP—major agricultural products are rice, corn, cassava, sugar, and rubber—major agricultural exports are rice, sugar, cassava products, rubber and corn—major agricultural imports are cotton, wheat, and tobacco.

Boosted by record rice exports from supplies held over from the bumper 1976 crop, the Thai economy registered considerable gains in 1977. Mining and quarrying, especially of tin and rock salt, were the fastest growing sectors, followed by construction and manufacturing. Drought in the northeast and floods in the south, however, induced a 1-percent drop in agricultural output. High production costs and marketing problems beset the textile industry, by far the country's largest industry.

Total export receipts rose 14 percent from the previous year's level, to a high of \$3.4 billion. Strengthened domestic demand, reinforced by increased Government expenditures, combined with high foreign exchange earnings to drive imports up 20 percent to \$4.3 billion. This effected a trade deficit of \$900 million and a sharp drawdown of reserves. Reserves were nevertheless sufficient to ensure the baht's stability. End of year efforts to secure substantial international loans were so successful that loans were oversubscribed.

At current prices, 1977 GNP grew 11 percent, reaching \$18.2 billion; per capita GNP rose from \$380 in 1976 to \$413 in 1977. Inflation brought real GNP growth to 7 percent in 1977.

Although agriculture accounts for only a

fourth of the GNP, agricultural production and processing remain the backbone of the economy. Agricultural exports earn more than 90 percent of Thailand's foreign exchange, while agriculture itself employs nearly 75 percent of the labor force.

Agricultural Production

Adverse weather during 1977 sharply reduced rice, corn, and sugar harvests; fortunately, the late-summer drought had only a small effect on the cassava crop. Aggregate output slid about 1 percent to \$1.2 billion, at constant prices. Favorable prices, however, combined with strong foreign demand for Thailand's major crops, boosted total agricultural receipts to \$5.2 billion, an increase of 3 percent over 1976.

Rice production for crop year 1977/78 (April-March) is estimated at 9.9 million tons, down 5 percent from last year's record crop, and 4 percent below trend. Although a reduction in the main crop, harvested in the fall of 1977, accounts for most of the decrease, persistent dry conditions and insufficient irrigation water auger a disappointing 1978 spring harvest as well. Crop quality is also down. Record rice exports of 2.9 million tons during 1977 brought ending stocks (December, 1977) to an extremely low 233,000 tons.

Of all Thai crops, corn was most severely affected by the drought. Production for crop year 1977/78 is expected to be 1.9 million tons, down 33 percent from the previous year's level and nearly 30 percent below trend. Small harvests, along with high export commitments, have led to high domestic prices and encouraged speculative hoarding. By mid-year, domestic prices—as much

as \$12 per ton above world prices—forced many exporters to take losses in filling contracts. Lagging exports and decreased corn use by the domestic hog and poultry industries could therefore result in the peculiar situation of ending stocks for June 1978 being double the level for June 1977.

Cassava production rose 5 percent above trend in 1977/78, increasing 6 percent over last year's 5 million tons to 5.3 million tons. Cassava cultivation has been particularly successful in the arid northeastern region, since cassava moisture requirements are low.

With Thai cane growers protected from low world prices by a fixed mill price, sugar production has remained profitable. Despite an increase in hectareage, the summer drought significantly lowered sugar production in 1977/78. Estimates are for a 1977/78 harvest of 1.9 million tons (raw basis), down 17 percent from the previous year's level, but still more than 75 percent above trend. Thailand's participation in the new International Sugar Agreement is likely to curtail further expansion of the domestic sugar industry.

Rubber production continued strong through 1977, with crop estimates between 437,000 and 442,000 tons, or 12 percent above the 1976 harvest and 7 percent above trend. A project to replant some 161,300 hectares in 4 years is under way, with 27,500 hectares replanted in 1977. Japan, the chief importer of Thai rubber, has been assisting Thailand in upgrading production and quality.

Reflecting heightened export demand for canned pineapple, production in 1977/78 is expected to follow the strong upward trend established since 1972. Production is projected at 1.3 million tons, up 12 percent over 1976/77. Planted area increased by 20 percent, to about 243,000 hectares. Thailand's six canneries present the largest market for Thai pineapples; canned pineapple production rose about 12 percent in 1977/78 to 75,000 tons.

Agricultural Trade

With Thailand re-emerging as the world's largest rice exporter, 1977 was inevitably a good year for agricultural exports. Estimated at \$3.1 billion, agricultural exports accounted for 92 percent of 1977 foreign exchange earnings. With the exception of corn, earnings were up for all major export commodities. Thailand's trade patterns evidenced no fundamental shifts during the past year: Japan remained the principal outlet for corn, sugar, and rubber; Indonesia for rice; the Netherlands for cassava products; and the United States for canned pineapple. Relative to 1976, the United States imported larger quantities of canned pineapple,

tobacco and rubber, all of which generally moved at prices below 1976 levels.

Record rice production in 1976/77 led to a spectacular volume of rice exports during 1977, 52 percent above the 1976 level of 1.9 million tons. Rice exports earned \$630 million in foreign exchange, i.e., nearly 20 percent of the 1977 total. Of the 2.9 million tons exported in 1977, about 60 percent moved under government-to-government contracts. Indonesia was the major buyer, with Nigeria, Singapore, and Malaysia also purchasing significant quantities.

Given favorable export prices and continued strong foreign demand, Thailand was forced to take measures to slow rice exports as the year progressed and it became increasingly clear that the 1977/78 harvest would be down. Both the rice reserve ratio, which requires exporters to sell rice to the Thai government in proportion to private rice sales, and the export price duty assessment were significantly increased. As of February 1, 1978, the reserve requirement for top-quality rice was 100 percent.

Because of the reduced corn harvest in 1977, exports were 41 percent below the 1976 level, sinking to 1.4 million tons. Commitments to Japan and Taiwan, chief importers of Thai corn, were cut back by one-half, to a total of 425,000 tons.

Exports of cassava products were up slightly in 1977, to 3.9 million tons. EC countries increased their imports, although complaints were made about excessive waste material in the shipments.

Although sugar export volume was up about 46 percent in 1977 to 1.6 million tons, value was up only 10 percent due to weaker world prices. As usual, nearly all sugar exports were raw sugar. The PRC and Japan were principal buyers, with over 85 percent of the market; Iran, Iraq, Malaysia, Sri Lanka, and South Korea were other buyers.

Foreign demand for Thai canned pineapple remained quite strong, resulting in record 1977 exports of 75,000 tons. The United States continued as the chief buyer, with West Germany, Spain, Canada, and Japan other important customers.

Agricultural imports generally make up about 10 percent of Thailand's total imports, and 1977 was no exception. Cotton, wheat, and tobacco continued to dominate farm imports. Increased output by the textile industry during the first half of 1977, combined with a drought-induced reduction in the 1977/78 domestic cotton harvest, brought raw cotton imports up 21 percent to 100,000 tons. Forty percent of this was supplied by the United States; in descending order, the

PRC, Sudan, and Brazil were the next largest suppliers.

Despite higher flour prices in domestic markets, 1977 saw ongoing strong demand for wheat imports, up 6 percent to 143,000 tons. The U.S. share was off, with volume dropping 39 percent to 51,000 tons, due to quality problems experienced in late 1976 and early 1977 and to low-priced Australian and Canadian supplies.

With 1977/78 domestic production of flue-cured tobacco down 8 percent to 34,000 tons, 1977 Thai tobacco imports rose a hefty 40 percent, to just under 10,000 tons. To cut down on foreign imports, Thailand has been encouraging domestic cigarette production. U.S. tobacco exports to Thailand in 1977 were approximately 7,000 tons, down 27 percent from 1976.

Agricultural imports from the United States rose 18 percent to an estimated \$113 million. Thailand now buys one fourth of its agricultural imports from the United States. Effective February 1, 1978, a ban on "luxury" imports, including fresh and dried fruits and fruit and vegetable juices, will affect U.S. sales of these items worth \$2 million in 1977. Thai exports to the United States in 1977 rose 14 percent in value, to \$96 million. More than half of this was for rubber.

Outlook

The 1978 economic outlook for Thailand is not particularly optimistic. Frequent Government changes continue to dampen the investment climate. Generally poor harvests of rice, corn, and

sugar in 1977/78 are expected to reduce exports sharply. Cassava exports are also expected to be down, due to diminished export demand. Imports, on the other hand, are likely to increase, especially of raw materials and machinery for manufacturing and development projects. Weaker prices for leading farm exports and higher prices for imports are anticipated for 1978; a trade deficit of \$1.5 billion is the projected result. Double-digit inflation and high unemployment are expected to continue throughout the year.

To ease the situation, the Thai Government is lifting its trade ban with Socialist countries, several of which have expressed interest in importing Thai commodities. The Government is also considering placing quotas on imports of Japanese consumer goods.

Rice exports for 1978 are projected at 1.8 million tons, less than two-thirds the 1977 level. Exports of Thailand's second-largest exchange earner, sugar, are also expected to slide in 1978 to 1.1 million tons, against 1.6 million in 1977. Unless the 1978 fall corn harvest is a bumper one, exports will probably remain small, with increased domestic consumption taking up the slack.

The brightest star on Thailand's horizon is ongoing development of substantial natural gas reserves in the Gulf of Thailand. Dependence on oil imports has meant considerable inflationary pressure. High production costs for the textile industry, due partly to higher oil bills, have hindered expansion and contributed to unemployment. (*Dean Richards*)

SOCIALIST REPUBLIC OF VIETNAM

Following 30 years of almost constant war and 2 years of below-plan performances by agriculture, by the end of 1977, the economy of the Socialist Republic of Vietnam (SRV) was characterized by: shortages of food; a decline in the rate of economic growth; a critical imbalance in foreign exchange; unemployment (especially in the South) and population displacement; unstable prices and dual currencies; stagnation in agricultural collective development in the South and the resulting continuation of two diverse and separate economic systems; and the continued underfulfillment of annual plans for the first 2 years of the Second Five-Year Plan (1976-80). The lack of attainment of goals, especially in agriculture, amplified the effects of nonfulfillment in other sectors of the economy.

Following the inclusion of the southern provinces, emphasis of the five-year plan was shifted from heavy industry to agriculture and primarily

agricultural related exports. However, agriculture's poor performance in 1976 resulted in substantial food shortages in early 1977. Disappointing early crop harvests in 1977 compounded the already inadequate food supply. Despite significant cuts in rations, large amounts of capital earmarked for reconstruction and industrial development were diverted to imports of food and other basic commodities. The resultant large payments deficit continues to be a constraint to SRV's economic development.

Agricultural Production

Unfavorable weather and poor organization of economic management and leadership were the most important causes of the poor agricultural performance in 1977. Total grain production—which SRV expresses in paddy equivalent—was down considerably in 1977, missing the target of 16 mil-

lion tons by almost 20 percent. Rice production, calculated at 11.3 million tons, declined 6.7 percent from 1976 and was 22 percent below the 1977 plan. Subsidiary food crops (corn, sweet potatoes, cassava, and beans) increased 12.5 percent to 1.8 million tons. Other crops, including oilseeds, cotton, soybeans, sugarcane, and a large array of tropical and semi-tropical fruits, registered increases.

Livestock, held somewhat in check by unfavorable weather, produced mixed results. Only small gains were made in large and draft animals, whereas poultry numbers increased more rapidly. Hogs probably declined; some areas reported losses and excessive slaughter. The goal of 410,000 tons of meat on the hoof (about 250,000 tons carcass weight), was allegedly topped in 1977, and a goal of 610,000 tons on the hoof was set for 1978. Supplementary meat was obtained from the fish catch, claimed to have exceeded 500,000 tons. A goal of 700,000 tons of sea fish was set for 1978.

Agricultural Trade

SRV's trade turned out considerably different than expected at the beginning of 1977. Instead of the value of exports increasing 55 percent, thereby reducing the trade deficit substantially and increasing imports of capital equipment and raw materials for industry, almost the opposite occurred. Exports, particularly fish and seafood, forest products, rubber, bananas, pineapple, tea, handicraft products, and processed agricultural products—were up by a claimed 40 percent during the first half of the year, but dropped with the corresponding decline in agricultural production as the year progressed. Imports of capital equipment and raw materials for industry gave way to large imports of consumer goods, primarily foodstuffs consisting of over 1 million tons of grain. An undetermined amount of food aid also was received. An incomplete enumeration of grain imports includes 140,000 tons of corn from Argentina and Thailand, 1.2 million tons of wheat and wheat flour from western countries and the USSR, and 80,000 tons of rice from Thailand. Some, such as part of the wheat purchased from Canada, may be delivered in 1978.

There was no trade with the United States during the year. However, some aid (foodstuffs) from private U.S. sources was authorized.

Because of shifts in imports caused by the

food shortage, and despite the increase in exports, a large trade deficit probably still existed at the end of 1977. The national plan is to reduce the trade deficit further by exporting an additional 45 percent in 1978.

Outlook

The year 1978 is the pivotal year in the current five-year plan. It began with a deficient food supply but with an air of official optimism. Prospects are for improvements in the agricultural sector and increases in crop production, especially if weather conditions return more nearly to normal. Acreages are to be increased substantially and production of the major crops is to be increased—20 percent for rice and 67 percent for subsidiary foods. An additional 300,000 hectares of new land, mostly in the South, are to be cultivated.

State investments in agriculture are to equal one-third of total state investments, a 65-percent increase over 1977. About 65 percent of agricultural expenditures are earmarked for irrigation and water conservancy, critical factors in the poor showing of crops in 1977.

Agriculture is to increase the gross value of output by 30.7 percent over 1977, almost double that originally planned. The size of the increase may be more an indication of the level of attainment needed in agriculture to maintain the planned scale of expansion in the current five-year plan than an attainable goal. The original 1980 goals remain intact.

The 1978 early rice crop has been planted on about 1 million hectares in the North and almost 800,000 hectares are planned for the South, but planting in the South is behind schedule due to the late harvest of the main season crop. Planned acreage for early rice for the whole country is almost 250,000 hectares larger than in 1977, and is just over half the planned increase for total rice for 1978. Weather conditions have been more favorable so far in 1978, but there is a shortage of fertilizer. As of mid-January 1978, it was reported that there was adequate water for rice and subsidiary crops in the northern provinces, but there was a lack of water for the winter-spring (early) rice crop in the South, due to the earlier-than-usual change in monsoon activity. However, with a year-round cropping season, many adjustments are possible later. (*Marion R. Larsen*)

Table 11 .--Indices of total agricultural production and per capita food production by country
1973-1977.

Country	Total agricultural production					Per capita food production				
	1973	1974	1975	1976	1977 <u>1/</u>	1973	1974	1975	1976	1977 <u>1/</u>
Bangladesh	117	109	123	116	128	93	87	96	86	93
India	129	122	139	136	141	104	96	108	104	106
Pakistan	157	162	155	165	176	119	119	114	121	123
Sri Lanka (Ceylon)	119	125	119	119	134	95	113	93	95	117
South Asia	129	124	138	135	142	104	97	107	104	107
Burma	116	114	117	117	118	90	88	89	87	85
Indonesia	132	139	139	142	139	106	109	106	106	101
Japan	110	110	115	109	117	98	97	100	93	99
Korea, Republic of	139	144	158	175	179	107	109	118	129	129
Malaysia, West	195	205	191	220	238	157	175	176	187	202
Philippines	143	146	163	172	175	108	107	117	120	120
Taiwan	146	146	145	162	164	113	111	108	118	117
Thailand	159	156	162	167	166	115	114	118	121	115
East Asia	127	128	134	136	141	101	101	104	102	103
East Asia(less Japan)	146	149	154	165	168	111	112	116	121	119
South and East Asia	128	126	135	135	141	102	98	105	103	104
Australia	118	122	126	123	121	108	107	113	111	109
New Zealand	115	115	123	130	127	103	100	106	112	105
Oceania	117	120	125	125	123	107	106	112	111	108

1/ Preliminary.

Table 12 .--U.S. agricultural exports by SITC categories to Asia and Oceania,
1972-77, part I.

Country and year	Total	Wheat and flour	Rice milled	Feed grains	Meat and meat prep. <u>1/</u>	Dairy products	Fruits, nuts, and preparation	Vegetables and preparation
Million dollars								
Asia:								
Afghanistan								
1972	8.7	7.6	--	--	--	.4	--	--
1973	1.3	.5	--	--	--	--	--	--
1974	.9	--	--	--	--	--	--	--
1975	3.3	.3	--	--	--	2.0	--	--
1976	1.6	.4	--	--	--	--	--	--
1977	1.3	.2	--	--	--	--	--	--
Bangladesh <u>2/</u>								
1972	116.6	53.4	16.4	--	--	--	--	0.1
1973	96.8	70.2	--	--	--	--	--	.1
1974	207.5	148.9	--	--	--	.1	--	.1
1975	329.5	124.7	164.5	--	--	3.2	--	--
1976	92.4	10.6	32.3	--	--	--	--	--
1977	129.4	51.3	20.5	--	--	1.4	--	--
Hong Kong								
1972	67.7	2.8	1.2	--	1.0	2.4	21.5	3.4
1973	147.1	7.0	27.9	--	2.0	4.0	27.7	6.7
1974	184.6	15.5	2.6	--	3.1	3.8	32.7	7.5
1975	130.3	11.9	.1	--	3.0	2.3	39.8	5.4
1976	206.1	16.7	--	.1	4.3	4.2	47.7	6.1
1977	303.9	11.1	--	.1	4.4	10.4	53.1	7.0
India								
1972	86.9	11.4	2.8	1.1	--	4.8	--	1.2
1973	333.2	212.0	--	71.4	--	.1	--	.4
1974	454.8	374.0	--	9.7	--	--	--	4.1
1975	759.9	612.1	.2	45.7	--	29.8	--	.4
1976	773.9	555.7	24.8	23.4	--	11.3	--	1.5
1977	290.6	19.6	1.2	--	--	6.7	--	1.2
Indonesia								
1972	134.0	23.4	60.5	--	--	2.6	.5	.3
1973	188.8	66.6	37.2	13.9	--	.2	.8	.5
1974	101.2	7.0	19.7	--	.2	.3	1.6	.7
1975	118.1	49.7	.1	--	.1	1.2	2.9	.2
1976	234.1	55.8	93.0	--	.3	2.1	5.2	.6
1977	242.0	50.9	70.5	.9	.4	4.5	4.6	.3
Japan								
1972	1,427.3	161.6	--	317.7	29.5	7.4	73.5	10.0
1973	2,997.7	405.9	.1	913.5	116.9	5.1	101.0	27.7
1974	3,478.9	571.9	14.4	1,112.2	41.2	6.7	104.7	35.7
1975	3,081.9	506.1	6.9	962.4	138.5	8.4	128.7	24.3
1976	3,563.1	522.3	4.5	1,027.8	187.3	5.6	155.6	39.4
1977	3,856.8	374.5	.5	1,066.8	152.3	11.1	152.9	39.9
Kampuchea/Cambodia:								
1972	12.1	2.6	5.7	--	--	--	--	--
1973	62.4	1.2	54.1	--	--	1.2	--	.1
1974	111.3	3.1	104.6	.5	--	--	--	.1
1975	25.0	--	25.0	--	--	--	--	--
1976	--	--	--	--	--	--	--	--
1977	--	--	--	--	--	--	--	--
Korea, Repub. of								
1972	363.4	128.8	88.9	29.0	.1	4.8	.6	.4
1973	635.1	282.3	82.1	82.7	.1	.1	.9	1.3
1974	742.6	261.2	108.0	140.3	.4	.1	.7	.8
1975	829.7	269.4	174.8	65.1	.2	.3	1.1	.1
1976	829.8	259.2	39.2	108.8	.4	.2	.8	.2
1977	919.3	201.7	11.7	158.4	1.3	.2	2.0	.2
Malaysia								
1972	11.0	.2	--	--	.1	.7	.6	.3
1973	20.9	1.7	--	.8	.1	.9	1.1	.6
1974	36.4	3.4	--	--	.2	1.0	1.2	1.1
1975	25.1	1.3	--	--	.3	.1	1.4	.6
1976	31.4	2.6	--	--	.4	.1	1.9	.5
1977	52.4	4.2	--	--	.8	.1	3.2	.2

See footnotes at end of table

Continued--

Table 12.--U.S. agricultural exports by SITC categories to Asia and Oceania,
1972-77, part I. --continued

Country and year	Total	Wheat and flour	Rice milled	Feed grains	Meat and meat prep. ^{1/}	Dairy products	Fruits, nuts, and preparation	Vegetables and preparation
	Million dollars							
Pakistan								
1972	118.6	81.5	9.9	.2	--	.6	--	.6
1973	114.3	89.2	--	--	--	--	--	1.6
1974	158.5	80.6	--	5.3	--	--	--	.1
1975	174.8	143.0	--	.4	--	3.1	--	--
1976	144.2	57.1	--	--	--	--	--	--
1977	85.1	--	--	--	--	.4	.1	--
Philippines								
1972	99.6	33.7	11.1	7.7	.4	3.6	1.1	.8
1973	117.3	49.4	--	1.9	.6	1.7	.4	1.9
1974	173.1	68.0	--	19.7	2.0	1.9	1.3	2.7
1975	162.8	69.8	--	5.9	.7	2.1	1.5	.7
1976	168.4	74.8	--	2.9	1.4	9.9	1.4	.9
1977	186.1	46.9	--	13.7	1.1	22.4	1.7	1.7
Singapore								
1972	21.9	.4	--	2.2	.4	.8	2.7	.9
1973	57.4	6.3	19.6	4.2	1.0	1.0	4.8	1.4
1974	43.3	8.2	.8	--	1.1	1.2	5.1	2.1
1975	43.4	6.8	--	2.5	1.6	.6	9.3	1.2
1976	56.2	7.0	--	.4	1.7	.6	10.9	1.8
1977	72.5	5.4	--	3.4	2.1	.5	13.5	2.2
Sri Lanka								
1972	22.6	21.4	--	.4	--	.4	--	--
1973	18.2	18.0	--	--	--	--	--	--
1974	10.1	6.4	--	--	--	--	--	--
1975	25.3	23.0	--	--	--	--	--	.2
1976	26.5	21.5	--	--	--	--	--	.4
1977	42.5	32.7	5.0	--	--	--	--	--
Taiwan								
1972	193.2	29.4	--	17.3	.1	1.9	.4	1.2
1973	406.1	85.1	--	59.2	.7	2.6	1.5	.9
1974	429.9	116.2	--	36.3	1.0	4.1	2.1	1.6
1975	564.7	72.2	--	90.2	.8	.3	3.3	1.4
1976	473.7	77.9	--	99.0	1.0	.3	3.8	3.0
1977	611.9	63.9	--	120.2	1.0	.2	4.1	2.3
Thailand								
1972	58.1	1.6	--	--	--	1.4	.2	.2
1973	61.1	2.8	--	--	--	1.1	.2	.3
1974	81.6	8.2	--	--	.1	1.4	.5	.3
1975	79.6	10.7	--	.1	.1	.1	1.1	--
1976	96.0	14.2	--	.1	.1	.2	1.6	.2
1977	108.4	7.4	--	.1	.2	.1	2.1	.1
Vietnam								
1972	148.0	16.6	63.7	5.2	--	11.5	--	.5
1973	150.4	18.2	80.5	6.4	--	2.4	.1	1.1
1974	221.5	19.1	148.7	1.3	--	1.7	--	.7
1975	28.1	6.9	9.4	--	--	1.6	--	.1
1976	--	--	--	--	--	--	--	--
1977	--	--	--	--	--	--	--	--
Oceania:								
Australia								
1972	35.4	--	.1	--	.1	.4	3.0	1.9
1973	54.6	--	.1	--	--	.7	3.8	5.5
1974	104.1	--	.2	--	.2	1.6	7.6	15.2
1975	72.1	--	--	--	.3	.4	6.8	6.8
1976	72.1	--	.4	--	.1	.3	9.1	5.7
1977	98.8	--	.9	--	.1	.6	9.3	4.7
New Zealand								
1972	10.4	--	.3	--	.1	.1	3.0	.4
1973	16.3	--	.4	--	.1	--	3.3	1.2
1974	26.5	2.4	.7	--	--	.1	7.0	.6
1975	20.1	--	.2	--	--	--	5.8	1.0
1976	25.6	--	.5	--	.1	.1	6.4	.9
1977	28.1	--	.4	--	--	--	5.9	.3

Note: Columns may not add to totals, which were taken from original sources, due to rounding; dashes mean negligible or none.

^{1/} Excludes poultry and poultry products

^{2/} Separate figures for Bangladesh not available prior to May 1972.

Source: Bureau of the Census, U.S. Department of Commerce; Foreign Agricultural Service, U.S. Department of Agriculture.

Table 13.--U.S. agricultural exports by SITC categories to Asia and Oceania, 1972-77, Part II.

Country and year	Tobacco unmfd.	Hides and skins	Oilseeds	Oilcake and meal	Cotton excluding linters	Animal fats and oils	Vegetable fats and oils	Other
Million dollars								
Asia:								
Afghanistan								
1972	--	--	--	--	--	0.2	.3	0.2
1973	--	--	--	--	--	.1	.6	.1
1974	--	--	--	--	--	.2	.6	.1
1975	--	--	--	--	--	.3	.6	--
1976	--	--	--	--	--	.2	.8	.2
1977	--	--	--	--	--	.2	.8	.1
Bangladesh 1/								
1972	--	--	--	--	14.0	3.3	20.4	9.0
1973	--	--	--	--	3.2	3.7	3.3	16.3
1974	--	--	--	--	40.6	5.8	10.5	1.5
1975	--	--	--	--	9.3	5.9	18.9	3.0
1976	--	--	--	--	35.1	.6	11.4	2.4
1977	--	--	--	--	38.9	5.4	11.1	.8
Hong Kong								
1972	3.0	1.6	.5	--	7.9	--	.5	21.9
1973	2.7	3.0	.2	--	36.7	--	1.1	28.1
1974	5.4	3.9	.5	.2	69.1	.2	1.5	38.6
1975	2.6	5.5	.1	.4	14.6	.1	1.3	43.2
1976	3.4	4.3	.1	.4	51.9	.3	1.7	64.7
1977	4.0	5.1	.7	.2	123.1	.1	2.7	81.9
India								
1972	.1	--	.7	.1	2.1	7.2	18.0	37.4
1973	.3	--	--	--	--	5.9	10.7	32.4
1974	.4	--	.2	.3	--	21.7	17.4	27.0
1975	.3	--	.1	--	--	--	7.6	63.7
1976	.2	--	--	--	54.8	5.1	47.1	50.0
1977	.3	.1	--	1.6	50.3	11.8	149.8	48.0
Indonesia								
1972	.4	--	--	--	38.8	--	--	7.5
1973	.8	--	--	--	49.4	--	.1	19.3
1974	1.0	--	--	--	59.8	--	.3	10.6
1975	.5	--	--	--	54.2	.1	.4	8.7
1976	.6	--	18.0	--	49.2	--	.1	9.2
1977	2.0	--	30.0	--	64.8	.1	.2	12.8
Japan								
1972	104.8	113.4	384.7	6.4	113.2	24.8	8.6	71.7
1973	101.8	150.9	731.7	57.2	178.6	59.1	24.1	125.1
1974	165.6	120.1	737.7	17.5	298.3	71.6	36.9	144.4
1975	132.2	103.1	667.3	1.0	204.4	24.9	14.2	159.5
1976	223.3	192.3	697.3	21.5	262.1	39.2	15.8	169.1
1977	260.0	200.1	965.1	56.1	313.2	41.9	16.8	205.4
Kampuchea (Cambodia)								
1972	1.8	--	--	--	1.5	--	.1	.4
1973	1.3	--	--	--	3.7	--	.3	.5
1974	1.9	--	--	--	--	--	.7	.4
1975	--	--	--	--	--	--	--	--
1976	--	--	--	--	--	--	--	--
1977	--	--	--	--	--	--	--	--
Korea, Repub. of								
1972	--	6.5	6.5	1.1	76.2	13.8	1.2	5.5
1973	--	18.5	19.7	--	111.8	27.5	2.4	5.7
1974	.8	24.5	6.1	--	148.4	42.5	2.1	6.7
1975	4.9	35.8	7.3	--	237.3	25.8	.9	6.7
1976	12.7	72.3	33.3	--	256.4	33.1	1.8	12.4
1977	21.2	94.1	44.3	--	315.3	38.1	1.8	29.0
Malaysia								
1972	6.4	--	--	--	1.2	--	.2	1.3
1973	9.4	--	--	--	3.6	.5	.2	2.0
1974	16.0	--	--	.1	10.9	.4	.3	1.8
1975	12.3	--	--	--	5.4	--	--	3.7
1976	14.5	--	--	--	7.7	--	--	3.7
1977	24.3	--	.4	--	14.8	.1	--	4.3
Pakistan								
1972	.7	--	--	--	.2	7.4	14.9	2.6
1973	--	--	--	--	--	6.4	16.3	.8
1974	1.0	.3	--	--	--	11.7	58.7	.8
1975	.9	.3	--	--	.5	18.8	7.4	.4
1976	1.1	.1	--	--	.9	11.5	72.1	1.4
1977	1.0	1.0	--	--	.5	22.5	58.3	1.3

See footnote at end of table.

Continued--

Table 13.--U.S. agricultural exports by SITC categories to Asia and Oceania, 1972-77, Part II.

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Country and year	Tobacco unmfd.	Hides and skins	Oilseeds	Oilcake and meal	Cotton excluding linters	Animal fats and oils	Vegetable fats and oils	Other
Million dollars								
Philippines								
1972	8.2	.1	.3	5.7	16.9	.7	.4	8.9
1973	9.1	.5	2.5	4.4	29.1	1.8	.8	13.2
1974	13.0	1.1	1.5	6.6	34.7	3.1	.8	16.7
1975	17.8	1.6	1.4	1.1	37.4	2.0	.4	20.4
1976	26.4	1.3	2.3	--	24.5	2.2	.4	20.0
1977	32.2	1.1	5.7	.3	26.6	1.9	.5	30.3
Singapore								
1972	2.8	--	7.0	--	.5	.1	.3	3.8
1973	2.9	--	7.0	--	4.2	.2	.4	4.4
1974	1.4	--	2.4	--	10.5	.3	2.6	7.6
1975	1.2	--	1.8	--	4.5	.1	.2	13.6
1976	3.5	--	5.4	--	8.5	.2	.2	16.0
1977	4.1	--	10.8	--	7.9	.1	.7	21.8
Sri Lanka								
1972	--	--	--	--	--	--	.3	.1
1973	--	--	--	--	--	--	--	.2
1974	--	--	--	--	1.8	--	.6	1.3
1975	--	--	--	--	.6	--	.3	1.2
1976	--	--	--	--	2.0	--	.7	1.9
1977	--	--	--	--	2.6	--	.4	1.8
Taiwan								
1972	14.6	3.8	76.1	1.0	40.6	3.2	1.0	2.6
1973	18.2	6.8	139.5	--	81.4	5.1	.3	4.8
1974	29.5	9.2	131.9	--	70.5	9.7	10.0	7.8
1975	27.3	10.7	211.5	.7	122.8	7.1	2.9	13.5
1976	19.5	15.1	148.4	1.1	84.4	2.5	.4	17.3
1977	37.6	18.8	195.5	2.8	133.6	5.2	.6	26.1
Thailand								
1972	35.7	--	.2	--	14.7	--	.1	4.0
1973	10.6	--	--	--	40.8	.2	.2	4.9
1974	28.5	--	--	2.7	33.4	.4	.5	5.6
1975	32.8	.1	--	--	24.4	--	.1	11.1
1976	37.0	--	--	--	30.8	--	.1	11.7
1977	28.3	--	1.8	--	35.1	.1	.4	12.7
Vietnam								
1972	20.3	--	.2	1.0	17.4	.1	7.1	4.4
1973	16.4	--	.1	1.2	19.1	.2	.7	5.0
1974	17.0	--	.3	.5	24.1	.4	4.4	3.3
1975	2.6	--	--	.1	5.2	--	.9	7.0
1976	--	--	--	--	--	--	--	--
1977	--	--	--	--	--	--	--	--
Oceania:								
Australia								
1972	17.2	.2	.9	2.0	.1	--	2.9	6.6
1973	17.9	.4	6.5	2.5	.8	.3	5.5	10.6
1974	30.7	.6	8.8	6.9	6.7	.9	14.6	14.1
1975	25.0	.6	1.4	.5	.6	.1	16.1	13.5
1976	17.5	.4	6.9	1.5	.5	.1	9.3	20.3
1977	25.9	.6	7.4	5.9	.7	.2	21.0	21.5
New Zealand								
1972	4.8	--	--	--	--	--	.4	1.3
1973	6.3	--	--	1.2	--	--	.9	2.9
1974	6.0	--	--	1.2	--	.1	4.0	4.2
1975	7.3	--	.2	.3	--	.1	2.4	2.8
1976	7.8	--	.8	.5	--	--	4.5	4.0
1977	8.5	--	1.9	.4	--	--	6.3	4.4

Note: Columns may not add to totals, which were taken from original sources, due to rounding; dashes mean negligible or none.

1/ Separate figures for Bangladesh not available prior to May 1972.

Sources: Bureau of the Census, U.S. Department of Commerce; Foreign Agricultural Service, U.S. Department of Agriculture.

Table 14.--U.S. agricultural exports to Asia and Oceania, annual 1975-1977.

Country	1975	1976	1977	Change: 1977 over 1976	
				Value	Percent
	Million dollars	Million dollars	Million dollars	Million dollars	Percent
World	21,884.1	22,996.7	23,671.0	674.3	2.9
Asia and Oceania	6,492.7	6,818.5	7,057.3	238.8	3.5
Asia:	6,382.4	6,699.2	6,904.4	205.2	3.1
Afghanistan	3.3	1.6	1.3	-.3	-18.8
Bangladesh	329.5	92.4	129.4	37.0	40.0
Burma	.1	--	--	--	--
Hong Kong	130.3	206.1	303.9	97.8	47.4
India	759.9	773.9	290.6	-483.3	-62.4
Indonesia	118.1	234.1	242.0	7.9	3.4
Japan ^{1/}	3,081.9	3,563.1	3,856.8	293.7	8.2
Kampuchea (Cambodia)	25.0	--	--	--	--
Korea, Republic of	829.7	829.8	919.3	89.5	10.8
Laos	.3	--	--	--	--
Macao	--	--	--	--	--
Malaysia	25.1	31.4	52.4	21.0	66.9
Nepal	.3	1.5	1.8	.3	20.0
Pakistan	174.8	144.2	85.1	-59.1	-41.0
Philippines	162.8	168.4	186.1	17.7	10.5
Singapore	43.4	56.2	72.5	16.3	29.0
Sri Lanka	25.3	26.5	42.5	16.0	60.4
Taiwan	564.7	473.7	611.9	138.2	29.2
Thailand	79.6	96.0	108.4	12.4	12.9
Vietnam	28.1	--	--	--	--
Other	.2	.3	.4	.1	33.3
Oceania:	110.3	119.3	152.9	33.6	28.2
Australia	72.1	72.1	98.8	26.7	37.0
British Pacific Is.	.1	--	--	--	--
French Pacific Is.	8.9	9.7	11.4	1.7	17.5
New Zealand	20.1	25.6	28.1	2.5	9.8
Papua New Guinea	.3	.3	.4	.1	33.3
Trust Pacific Is.	7.1	9.5	11.6	2.1	22.1
Other	1.7	2.1	2.6	.5	23.8

Note: Dashes mean negligible or none.

^{1/} Includes Ryukyus.

Source: U.S. Department of Commerce.

Table 15.--U.S. agricultural imports from Asia and Oceania, annual, 1975-77.

Country	1975	1976	1977	Change: 1977 over 1976	
				Value	Percent
	Million dollars	Million dollars	Million dollars	Million dollars	Percent
World	9,310.1	10,990.4	13,457.8	2,467.4	22.4
Asia and Oceania	2,511.8	2,733.3	3,143.5	410.2	15.0
Asia:	1,669.7	1,815.9	2,239.8	423.9	23.3
Afghanistan	7.7	9.4	13.2	3.8	40.4
Bangladesh	3.3	4.3	3.5	-.8	-18.6
Burma	.2	--	--	--	--
Hong Kong	10.7	13.6	18.8	5.2	38.2
India	156.6	191.4	181.3	-10.1	-5.3
Indonesia	267.6	405.7	628.2	222.5	54.8
Japan	63.8	76.4	79.2	2.8	3.7
Kampuchea(Cambodia)	--	--	--	--	--
Korea, Republic of	25.6	41.2	50.0	8.8	21.4
Laos	--	.2	.3	.1	50.0
Macao	.3	--	--	--	--
Malaysia	325.4	313.8	332.8	19.0	6.0
Nansei Islands	--	--	--	--	--
Nepal	--	--	.1	.1	--
Pakistan	3.1	2.1	1.8	-.3	-14.3
Philippines	489.2	497.5	599.0	101.5	20.4
Singapore	40.5	32.2	43.7	11.5	35.7
Sri Lanka	29.9	33.5	50.7	17.2	51.3
Taiwan	166.4	108.7	141.0	32.3	29.7
Thailand	78.0	84.6	96.2	11.6	13.7
Vietnam	.5	.3	--	--	--
Other	.9	1.0	--	--	--
Oceania	842.1	917.4	903.7	-13.7	-1.5
Australia	579.7	573.5	519.1	-54.4	-9.5
British Pacific Is.:	--	--	--	--	--
French Pacific Is.:	.1	.1	.1	--	--
New Zealand	210.0	280.7	308.6	27.9	9.9
Papua New Guinea	33.5	60.7	69.2	8.5	14.0
Trust Pacific Is.	--	.7	1.5	.8	114.3
Other	18.8	1.7	5.2	3.5	205.9

Note: Dashes mean negligible or none.

Source: U.S. Department of Commerce

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